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THE CITY OF BRASS.

THERE was no doubt that our wildest dreams were in process of realization.

Following in the track of the Emir Mousa and the Sheikh Abdelsamad, we were on our way to the City of Brass and to the shores of that unknown sea which contains the imprisoned Genii.

We had passed the palace of Kosh, the son of Sheddad; had ascended its unequalled stairways of many-colored marbles; had wondered at its lofty walls and arches, decorated with gold and silver and minerals; and, like the Emir Mousa, had wept until we were insensible, over its pathetic inscriptions.

The Horseman of Brass we had found, reared full high as of old on his lofty hill, the broad head of his spear still blazing with light, and his metallic face set in the direction of the invisible city.

At last we stood beneath the immeasurable pillar of black stone in which Danhash the Afreet, sunk to the pits of his four arms and his two wings, was confined and made fast with the seal of Solomon.

"There," said the great and good

man with whom I made that memorable journey, — "there is the first claimant on our philanthropy. We must hasten to extricate this victim of centuries of oppression."

Thoroughly as I confided in the wisdom and the excellent intentions of my revered friend, often as I had seconded his motions at anniversaries and conventions, I was alarmed at his present proposition. Even if the aspect of this applicant for our sympathy had been benevolence itself, he seemed to me too large to be treated with childlike confidence.

Judging by the eye alone, I should say that the pillar was at least seven hundred feet high, and that the Afreet's head rose two hundred feet or more above the pillar. What if a fellow who measured some seven hundred and fifty feet in his stockings should, to use a Southern expression, get after us? Small chance of life; he could swallow a convention of philanthropists; he might trample us to jelly without knowing it.

What made the matter worse was that our friend Danhash's physiognomy

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and physical peculiarities of development were in the highest degree disquieting. The author of the *Arabian Nights* (that fervid genius to whom we must bow as to one of the unknown gods of literature) has described him with his usual fidelity and picturesqueness.

A jet-black monster; two immeasurable eyes like coals of fire; in the middle of his forehead a third optic, emitting sparks; a mouth which reminded me of the Grotto of Antiparos with its stalactites; a Niagara of hair, hanging in tufts like the tails of horses. His two human arms were at least eighty yards longer than I care to see, and not at all such members as a man likes to have around him. As for his other pair of upper limbs, equally disgusting in the matter of magnitude, and fashioned like the forelegs of a lion, with incredible claws attached, they were still less to my taste. Nor can I say that I have a weakness for wings when they are some hundreds of feet in length, and the wind sighs through their ponderous plumes as through a pine forest.

Such was Danhash, the Afreet of the pillar. The everlasting nigger, that unparalleled nightmare of our age of visions, never appeared half so awful to the imagination of silver-gray politicians.

"My dear Harrison," said I to my snowy-haired, but ever youthful, perhaps too youthful, friend, "had n't we better consider this business a little before we decide upon it?"

"Not an instant," he replied. "Once the path of humanity is clear before you, plunge into it without a moment of reflection, if it takes you up to your neck at the first jump. Consideration, my dear friend, is a temptation of the evil one."

At this moment the Afreet, who seemed to have been dozing during our approach to him over the level desert, came to his senses with a start which agitated the air for miles around, and broke out concerning his troubles in a voice equal to half a peal of thunder.

"Extolled be the perfections of my

lord who hath appointed me this severe affliction and painful torture until the day of resurrection!"

"Beautiful!" exclaimed Harrison, a born admirer of monsters and of everything that they do or say. "The very words which he uttered in the times of the Caliph Abdelmelek! Could anything be more devotional and pathetic?"

"I like his phraseology," I responded. "But one can't be too sure of the conversion of a fellow who is seven hundred and fifty feet high. Magnitude like that is a crime which requires many good works to atone for it, or at least the most honorable intentions. Suppose you catechise him on the main question,—our safety."

"Hand me the instruments!" was the sublime response of John Howard Harrison.

I must say a word here concerning the character and history of my friend. He was a Bostonian by birth, a philanthropist by instinct, and a follower of isms by religion. Need I add more?

While we were making our arrangements to ascend the pillar, the monster discovered us. First he bent his head awkwardly to look at us, much hampered apparently by his fixed position and by the capital of the pillar, like a man troubled with too high and stiff a cravat. Then he burst into a deafening whimper, reciting his sufferings and imploring compassion. A most babyish monster, as plaintive as Old Grimes. I should have laughed in his face, if I had not been nine hundred feet too short. But my merriment was soon drowned in a tear almost as big as a hogshead, which, falling from that enormous altitude, laid me as flat as a flounder, and as wet.

"Hold in!" I could not help remonstrating. "Your grief is altogether too overwhelming."

The Afreet having dried his lachrymals on his hairy paws, we took advantage of the clearing off to send up a kite, and succeeded in lodging it across a finger of one of his human hands. He did not seem to be entirely lacking in common sense, for he immediately

commenced hauling up the string. To the end of the string a rope was attached, and to the end of the rope a huge basket containing Harrison and myself, together with our little store of instruments and chemicals. Whoever has ascended Mount Tom on the railway can faintly imagine what were my feelings when we were jerked from the earth, and commenced mounting that tremendous perpendicular.

As soon as the Afreet felt us between his digits, he lifted us to the level of his two lower eyes, and, holding us off about one hundred and fifty feet, stared at us long and earnestly. It was an awful moment; he might drop us—and I looked down tremblingly; he might eat us—and what a mouth he had! So strange, however, are the workings of the human mind that even in that fearful conjuncture I could not help thinking, with a sense of amusement, what a dentist it would take to fill one of those teeth, and what an amount of chloroform would be needed to tranquillize the patient.

"O sons of Adam, what desire ye?" he whispered, very much as the ocean whispers in a storm.

"We have come to liberate you," bawled my comrade through a speaking-trumpet. "Place us upon the pillar, and we will remove the seal."

"It is the seal of Solomon, upon whom be peace!" thundered back Danhash. "Have ye power above him? Ye will bring upon me a punishment greater than I have yet borne. I have a mind to dash you to the earth."

I wished we were in Boston, or even in New York or Philadelphia.

But Harrison was all himself, as calm as if he were on a platform, with a crowd of roughs throwing rotten eggs at him; as fluent and mellifluous as if he were addressing that other Afreet, the sovereign people. A few sentences from the golden-mouthed orator secured the confidence of our friend Danhash and made him blubber with joy.

"If thou freest me," he said, "I will worship thee and be thy slave."

A swift flight through the air—

which stifled one of Harrison's eloquent outbursts against tyranny, and set my head to swimming as if it were independent of me—landed us in an instant upon the capital of the pillar, close by the beating of the Afreet's mighty heart.

Modern chemistry proved too much for ancient alchemy. The fated leaden seal, deeply imprinted with Hebrew characters, was soon eaten out of the black stone by an acid. As the last globule of it vanished into vapor, there came a change: the great basaltic column trembled, crumbled, became atoms, became smoke; held fast in the Afreet's hands, we soared upwards amid clouds and clamor; a deafening yell of demoniacal delight shook the atmosphere; it was a simoon of dust and speed, vocal with thunder.

What altitude we reached I cannot say, for it was impossible to see the earth. The Marid carried us in the hollow of his two hands, which made a basin of over forty feet in length, with sides very nearly thirty feet high, being something above the average Bostonian stature. I might, perhaps, have got a peep downward between his fingers; but the very thought of venturing near one of those chasms made my flesh creep as if it were no longer attached to my bones; and, moreover, the idea that the monster might sneeze, and blow us to destruction without knowing it, filled me with such terror that I lost all my curiosity.

In this situation it was really infuriating to hear Harrison say, "How delightful to share in the joy of this gigantic emancipation!"

Presently Danhash put us into the hollow of his right ear, and asked us the very sensible question, where we wanted to go.

I stopped my auricles to keep out his uproar; it was like a Fourth of July celebrating on one's tympanum.

Harrison responded, with his usual readiness and calmness: "First to the City of Brass, and then to the Sea of Kakar."

"Upon the head be it!" said our

monster. "And if thou canst remove the enchantment from the City of Brass, thou shalt be its Caliph, with subjects like the sands of the sea. And if thou canst open the bottles of brass that are in the Sea of Kakar, thou wilt thus deliver all my Marids, and they also shall be thy slaves."

"Friend Danhash, all that shall be done," replied Harrison. "Only, these people and Marids shall be free. I enslave no man and no devil."

"And Solomon?—upon whom be peace!" continued the Afreet, trembling so that he nearly dropped us. "Will he not pursue us and bottle me up again?"

"I am happy to inform you that Solomon is dead," observed Harrison, too logical a philanthropist to sympathize with a man who could limit any freedom, even that of the principalities and powers of the air.

At this piece of news the Afreet laughed so violently that all the trees on the top of a neighboring mountain fell prostrate. What was worse, he cut a number of joyful capers and summersets in the empyrean, merely taking the precaution to close his fingers above our heads, and thus save us from being sown broadcast over the earth. I can safely affirm that being jerked about in a balloon, or tossed on a tempest in a fishing-smack, is nothing to atmospheric tumbling with a Marid. Our predecessor in philanthropy, Sancho Panza, was less frightfully tossed, and in a softer blanket.

After we had gone heels over head half a dozen times, the Afreet became more tranquil and resumed conversation. I was alarmed now to discover in him a certain falling from grace; no more of the edifying spirit of resignation in which we had found him; no more invocations of peace upon the name of Solomon; no more confessions of faith. He muttered threats against his old enemy Dimiriat, and talked about setting up his own ancient idol of carnelian, if he could find it.

I whispered to Harrison: "The devil was sick; the devil a monk would be:

the devil got well; the devil a monk was he."

But my friend, with the unshakable affection of a humanitarian for his pets, would not hear a word against Danhash.

"No wonder the poor fellow is a little put out by the recollection of his unmerited sufferings," he remarked. "Moreover, the long confinement has probably injured his digestion, and so made him nervous. He will feel better, and he will be better, after he has had some exercise."

Presently we beheld the City of Brass,—the long, black, castellated line of its walls along the horizon, and its two monstrous brazen towers, soaring and gleaming like flames.

Of the ten damsels who lured the twelve servants of the Emir Mousa to break their necks, and who nearly overcame the prudence and piety of the venerable Sheikh Abdelsamad, we saw nothing. Danhash took us clean over the battlements, and set us on our feet in the principal square of the deserted city, without other misadventure than stubbing our toes into the gravel.

His next performance was to turn into smoke and vanish. Just as I had begun to entertain a hope that he was dead, or that he had been bottled up and pitched into the Sea of Kakar by some mysterious power, he reappeared in a smaller edition of himself, only about ten feet high.

It was gratifying, however, to perceive that, either because he felt weaker in this belittled state, or because he was impressed by the solemn spectacle of punishment around him, he had recovered somewhat of his former spiritual humility.

"This city presenteth a lesson to him who will be admonished," he said. "The inhabitants were of the tribes of Adam; but they became obedient unto Eblis, and worshipped his gods. For this they were chastised by Solomon, upon whom be —. There fell upon them an enchantment of starvation. They saw food around them, and knew it not to be food, and so died of famine.

Break the charm, and restore them to life, and they are thy subjects."

My weak mind was not clear as to the wisdom of setting three hundred thousand devil-worshippers in working order.

But Harrison, true to his great nature, did not waver an instant. He broke the enchantment as unhesitatingly as he had of old shattered the Moloch of capital punishment; as soon as he found the seal of Solomon, he poured his acids upon it and evaporated it.

The next moment the city was in a buzz; multitudes crowded the cook-shops and markets; there was one vast, sublime outcry for dinner. Imagine what a meal they made, after a fast of three thousand years!

Meantime the Afreet flew to the top of one of the brazen towers, and roared for half an hour with laughter, as noisy as if he were a bell.

It has been remarked that the humor of one age is not like that of another; that, for instance, the jokes of Aristophanes are but dimly visible to us moderns; and that the ancient Greeks would probably have seen no fun in Dickens. The observation may be extended to the humor of different species. Horses laugh, but not at what tickles monkeys; and monkeys grin, but not at what sets men a roaring.

Thus, I had noticed that Danhash was not amused at what amused me. To keep him in good-humor, I had repeated to him some of the crack jokes of Artemus Ward, and some of the best stories in our comic almanacs, without raising a smile on his mountainous visage. But now and then, when perhaps the occasion seemed to me one of extreme gravity, this huge wretch would thunder with merriment.

As soon as the resuscitated multitude of bronzed devil-worshippers remarked our Bostonian complexions, they concluded that we were gods, and wanted to adore us. Harrison's conscientious outcries, to the effect that we were men and brethren like unto themselves, seemed to me particularly

ill-timed, and soon brought us into trouble. A starveling rabble of the lower classes decided that, if we were not fit to worship, we were fit to eat. I have no doubt that we should have been digested very speedily, but for an outburst of the devotional element of the city. A party of reverend priests sallied from a temple, dispersed the lean rascallions who were about to make cutlets of us, dragged us with their own sacerdotal hands into their venerable fane, and proceeded to offer us up to a porphyry idol of sublime antiquity and ugliness. Great as the honor undoubtedly was, I instinctively shrank from accepting it, and could not help being bitter upon Harrison.

"You see it won't do," said I, as I lay beside him on the sacrificial altar,—"it won't do to enfranchise everybody and everything that you come across."

"What these people need," he replied, "is a free press, a common-school system, and the ballot."

"Do you suppose," demanded I, reverting to a subject on which we had often disputed,—"do you suppose that universal suffrage, etc., will make Christians and moralists out of our Chinese immigrants?"

"What matter?" was his heroic answer. "Let the strongest faith win!"

The chief priest was about to cut short our argument with a carving-knife, when I heard a supernatural shout of laughter behind me, and Master Danhash came flying into the temple, buzzing along the walls and knocking himself against the pillars like a monstrous horn-bug. Although the good people around us did not seem astonished at this phenomenon, they nevertheless suspended their pious offices upon our persons, and raised their eyes as if in expectation of supernatural guidance.

At last our aerial friend perceived us. The next instant he went into one of his fits of smoking, and very soon vanished in thin curls among the arches, like a whiff from a cigar.

Precisely in proportion as he disappeared, a small flame lighted up on the

head of the idol, and increased to an excessive brightness.

Never were pyrotechnics more satisfactory : the four thousand persons present went down on their eight thousand knees ; the priests loosed their hold on our arms and let us sit up on the altar. Next the stony lips of the porphyry horror gave utterance to the following oracle :—

"These, O sons of Adam, are they who delivered you. They are your prophets, and ye are their followers."

We were worshipped ! Useless for Harrison to recommence his perilous babble about our being men and brethren ; his voice was ever more liberally kissed than were our toes, though cased in calfskin. In proof of this wearing osculation I can show my capped boots.

Prophets are better off in the City of Brass than they have been in some other places of which history makes mention. After being sumptuously fed in the temple, we were boxed in two jewelled palanquins of ivory, and borne on men's shoulders, through streets lined with worshippers, to the royal palace.

If I should describe all the wonders of this superb building, I might incur a suspicion of exaggeration, and throw a doubt on the rest of my narrative. I will however venture to say that I could not have believed in so many beryls, had I not seen a still greater number of jacinths. Perhaps I can best give the reader an idea of the magnificence of the palace by simply stating that it was finer than that of Kosh, the son of Sheddad.

Through amazing doors of teakwood inlaid with ivory, between incredible rows of soldiers armed with gilded shields and spears, along marvellous saloons floored with marble and incrustured with arabesques, we were borne with a solemnity and care which did credit to our attendants,—closing our progress beneath a dome of fabulous vastness and splendor.

When I say that we were now at the entrance of a lofty kiosk of the purest alabaster, I shall not be credited except by those who are familiar with the Arabian Nights. Indeed, we doubted our own senses until I had rubbed my eyes and Harrison had wiped his spectacles.

Dismounting, we were ushered into the kiosk, and found ourselves in the royal presence. Although I respect the crowned heads of Europe, Asia, and Africa as much as is permitted to a republican and philanthropist, I am obliged to declare that I never saw another queen so incredibly lovely as her Majesty of the City of Brass.

No wonder that the Oriental historian describes her as "a damsel resembling the shining sun," and asserts that "eyes had not seen one more beautiful." No wonder that the Emir Mousa " marvelled extremely at her comeliness, and was confounded by her beauty, and the redness of her cheeks and the blackness of her hair." Nor does the same great authority exaggerate when he speaks of her couch adorned with jacinths, her garment of brilliant pearls, her fillet and necklace of jewels, and her crown of red gold.

Words, however, fail before this august lady's beauty and magnificence. Such things must be seen to be believed.

The bigoted party who had been about to operate on our windpipes with the pontifical butcher-knife now went on his knees with a thump which did my heart good, and informed her Majesty of the revelation which had been made by the idol. The scene of excitement which followed was unparalleled in my experience, familiar as I have been with conventions, anniversaries, and the like. The queen threw herself at our feet ; so did her charming sister, Rose in Bloom ; so did all her train of odalisques. We were the objects of a gratitude and adoration which could not have been expressed in a language less copious and hyperbolic than the Arabic.

It was in vain for Harrison to declare

that we were not prophets, but Bostonians. This last word, being untranslatable and mysterious, simply aided to impress the imaginations of our adorers, and to make them more assiduous in their genuflections. The result was, that my intelligent friend gave up his absurd expostulations, and played the part of sacred monkey with a patience which would have been praiseworthy in a brute and which was beautiful in a man and reformer.

The close of this eventful day found Harrison and myself occupying a magnificent suite of apartments in the palace, and waited upon by two hundred slaves of two hundred different complexions. Having dismissed one hundred and ninety-nine of our attendants, we held a discussion as to how much we had accomplished for the cause of humanity.

"So far it is almost too good to be true," said I with irony. "If we had fallen heirs to populous estates in Cuba or Brazil, things would not have looked so very different."

"We have reason to congratulate ourselves," gravely responded Harrison, who, like all born humanitarians, is stone-blind to a joke. "This has been truly a day of Progress."

"If setting loose a devil seven hundred feet long, and bringing about a rousing revival of paganism, is progress, I grant it," was my comment.

"This is but the beginning of the end," he continued. "We have secured our vantage-point. Now we must use it. I shall commence great reforms among these people at six o'clock to-morrow morning."

"The first step, if there were no legal obstacles in the way, would be for you to marry the queen," said I. "In the character of prince consort you could back up your other character of prophet."

"I have decided upon it," was the serene reply.

Knowing that Harrison had a wife in Boston, I felt the goose-flesh of reverence on my back. This great, pure, beneficent nature was willing to bear

the yoke of polygamy for the sake of doing good.

"If it won't interfere with you, I shall propose to the queen's sister," I ventured to add. "Rose in Bloom is almost as handsome as her Majesty."

"Beauty has nothing to do with it," said he reprovingly. "If the queen were as ugly as Danhash, I should marry her for the good of her subjects. Love is but the servant of philanthropy."

Fearing lest Harrison's enthusiasm for beneficence should lead him to espouse, not only the queen, but Rose in Bloom, and every other respectable lady in the kingdom, I set about my own courtship the very next day, speaking of it first to her Majesty. She received my proposition most graciously and had the goodness to refer me directly to her sister.

I had my doubts and terrors as I entered the ivory reception-room of the princess. I was the youngest and handsomest Bostonian in the City of Brass; but I was only a minor prophet compared with Harrison; and women do so love distinction! Considering the superstitious enthusiasm of which the sex is capable, there was danger that every female in the land might desire to be sealed to the august head of our mission, thus creating a sort of Oriental Utah in which I should be a bachelor gentile.

Blushing and trembling, I inwardly queried, How is it with Rose in Bloom?

Her Royal Highness received me with that charm of manner which every one familiar with the Arabian Nights must have observed in the princesses of the Orient. One wave of her jewelled hand transported me to her side; another wafted out of the ivory boudoir her train of odalisques. Next, the witchery of her eyes and smile seated me cross-legged beside her, upon the divan of gold brocade.

Our courtship was somewhat in the style of children making love by alternate bites of apple. Dipping her rosy fingers into a jasper vase, brimming with the delicious confectionery which is made

in the City of Brass, she helped me and helped herself. I masticated and worshipped in silence; heart and mouth were both too full to speak. Moreover, I remembered that it was her ladyship's privilege, as the scion of a royal race, to take the initiative. It is always leap-year with women of her social position.

After a time, blushing like a parterre of roses, and turning her eyes shyly from me, she murmured: "A nightingale has told me what is in your heart. Fear not to repeat his song."

Full of joy and confectionery, I undoubled my legs and fell on my knees. Few words were needed: she stretched out her hand right royally; I kissed it right democratically: we were engaged. Ah, that hour of gladness! it now seems a delusion.

Our happiness was soon disturbed by the necessity of travelling in the path of Progress. Harrison was not a man to let grass grow under the feet of Reform, and he called for beneficent measures with exasperating vigor and perseverance.

I must confess that I wanted him to keep quiet. Betrothed to Rose in Bloom, and living in the most luxurious palace of the Thousand-and-One Nights, it seemed to me that the world went well enough and that there was no need of disturbances. I was like the old lady, who, having taken a glass of hot sling, decided that the weather had moderated, and that it was useless to send wood to the poor. With me life was summed up in sitting beside my princess and eating sweetmeats from her delicious fingers. I wished Harrison would persecute some other city with his philanthropy.

But Harrison was odiously good. Great things were done with disgusting rapidity. Slavery was abolished; universal suffrage was established; the temples were turned into school-houses; there was a free press, free trade, free everything.

It was pleasant, however, to observe, that our reformer stubbed his progressive toes against divers obstacles. For

instance, nobody would take the trouble to read his radical newspapers, and everybody persisted in voting on the side of the government. In vain did Harrison proclaim that, without two parties, there is no freedom of speech or thought, and no true liberty. He nearly broke his voice in a fruitless attempt to get up an opposition to himself.

"The gods forbid that we should say aught against our most excellent queen and our most holy prophet!" was the response of the elders of the people.

"I'll bring them to exercise the right of discussion," said my friend to me, in hot anger. "I shall organize an expedition to the Sea of Kakar, to unbottle the Marids and Afreetes. We will see if that will not awaken public opinion."

"Don't!" I implored. "It would be literally raising the *inferno*. There are nearly a million of those devils."

"We owe it to Danhash," was the sublime reply. "They are his brethren, and he demands their liberation. Let justice be done, if the heavens fall."

To crown my discontent, I was made chief of this abominable picnic. I consoled myself by taking along with me Rose in Bloom, two hundred servants to wait upon us, a camp equipage which loaded a thousand camels, and a gilded escort of five thousand cavalry.

The Sea of Kakar, as every educated person knows, is beyond the country of the blacks. Consequently, travelling at the rate of twenty miles a day, and halting Sundays, we were just three weeks in reaching it. Arrived there, we hired twenty-two thousand of "God's images carved in ebony," and began drawing seines for potted goblins.

This species of fishing is certainly a very curious and interesting recreation. You land your brass bottle, knock a hole in it with a hatchet or pickaxe: out comes a blue smoke which rises several hundred feet; then you hear a horrible voice, saying, "Repentance, O Prophet!" After that the Marid gets himself together, takes the disagreeable shape that belongs to him, and ske-daddles.

We worked thirty-one days, opening an average of five thousand bottles a day; the cheering result being one hundred and fifty-five thousand free and independent devils. The country was darkened with the shadows of these flying monsters. You could see them sitting on the mountains in rows, like crows on the bare branches of an autumnal tree, or like turkey-buzzards on the roof of the Charleston (S. C.) meat-market.

At the close of five weeks Prophet Harrison graciously granted me leave of absence to visit the City of Brass and celebrate my marriage with Rose in Bloom.

"Congratulate me!" he said when we met. "I have been hooted in the streets to-day by the rabble. It is the dawn of independent public opinion. It is the genesis of freedom."

"What have you been doing?" I demanded, angry enough to bottle him up and pitch him into the Sea of Kakar.

"It is this Afreet business," he responded, radiant with joy. "These people have now a grievance which even their darkened minds cannot ignore. At last,—at last, O gracious powers,—there is an opposition, there is free discussion."

In truth, the Afreets and Marids were giving the citizens no end of trouble. These gigantic nuisances were, of course, fearfully hungry after their lent of three thousand years. Although they had the right of suffrage, and the chance of earning an honest living under an eight-hour law, they stood in such need of immediate nourishment that they seized whatever they could lay their claws on, gobbling sheep by the flock and cattle by the herd. In all directions you could see couples of them pulling at a horse or an ox, like chickens hauling on the two ends of a caterpillar.

The result was that, although we were in the full reign of humanitarianism, starvation threatened. Harrison would do nothing to diminish the distress, or soothe the discontent of the citizens. When I begged of him to

urge upon the Marids the propriety of restricting themselves to half-rations, or of emigrating to Australia or the United States, he talked philanthropy. The Marids were free; the Marids had the right of suffrage; everybody was free and had the right of suffrage; it was an era of reform and progress and liberty; everything would manage itself.

For the first time in my life it struck me that an individual greatly in advance of his age may be as much of a nuisance as an individual greatly behind his age.

From man I appealed to monster; from would-be prophet to could-n't-help-it devil. Master Danhash, with the good-nature of large people, was still going about in a ten-foot-high state, which was certainly obliging in a fellow who might, if he chose, be seven hundred and fifty. Beckoning him down from his favorite sunning-place on one of the Towers of Brass, I had a serious conversation with him concerning our social and political crisis, and urged him to send his Marids to some other part of the planet.

He replied that he would be happy to bundle them off, but that it would be unconstitutional; that by the law of the land all Marids and Afreets were now free and equal; that consequently he, Danhash, had no power to give orders. He further informed me that the Prophet had found that famous talisman, the idol of red carnelian, whereby the tribes of Eblis were wont to be governed, and had buried it in some secret place so that no one might use it.

Having made these statements, Danhash burst into one of his irrational bellows of laughter, and flew up to his perch.

I rushed back to Harrison and firmly demanded the idol.

"Never!" returned this heroic being. "What! appeal to that relic of a degraded superstition! that figment of a mouldering past! Deprive one hundred and fifty-five thousand devils—but just liberated and enfranchised—of

their freedom of will! The allegiance which I owe to the eternal principles of right will not permit it. I shall obey my conscience in this matter, and let the consequences take care of themselves."

The consequences were not long in making their disagreeable appearance. Even while we argued, a huge and unintelligible roar, the howling of an angry city, approached the palace. Stepping to a balcony, we saw the streets surging with men, and caught their furious shouts of, "No more Marids! Death to the Prophet of Evil! Death to the ill-omened ones!"

"We are lost," said I, "unless you find the talisman and summon the power of Danhash."

"Better die than be saved thus!" replied Harrison. "Better perish by Progress than be saved by the Past!"

"But the queen may perish also,—and Rose in Bloom," I shrieked.

"Let them all go!" declared this monster of conscience. "I would sacrifice all my race, rather than take a step backward."

Turning my back on him with profound respect, I sprang out of the apartment through a crowd of yelling savages, and rushed along a monstrous colonnade toward the kiosque of my princess, determined to save her or perish by her side. But at the termination of the corridor another screaming crowd met me, grasped at me with its hundreds of eager arms, paralyzed my resistance, and bound me fast.

Then a trampling and bellowing torrent of human wrath bore me away from the palace and through the swarming city. For miles I was carried on the shoulders of assassins, under a never-ceasing storm of maledictions and indignities. Multitudes reviled me; a population threatened me. I seemed one cursed by the human race, and condemned to death by mankind.

Into the Tower of Brass, at last; up its hundreds on hundreds of brazen steps; circling aloft spirally, dizzily,

infinitely; ascending, as it were, the cycles of eternity. When it seemed as if the heavens must have been reached, I was brought out upon a narrow balcony, and saw the earth beneath me. Then, with one mighty heave of rage, and one supreme shout of execration, I was hurled into the abysses of air. It is needless to say that I fell, and that I fell an enormous distance. My idiosyncratic respect for the law of gravitation would not permit me to do otherwise.

I might have been falling yet, but for my amiable friend Danhash, who doubtless remembered his deliverance from the pillar, and felt that one good turn deserves another.

I was half-way down, or perhaps three quarters of the way,—it surely matters little which,—when he caught me on his shoulders, shaking with laughter.

I begged with tears to be taken back to Rose in Bloom, but he shook his ill-shapen head over the desperate proposition, and never relaxed the beat of his mighty pinions.

At midnight, hundreds of miles from the City of Brass, he deposited me in an oasis of the Sahara, near an encampment of English travellers, and immediately soared aloft again, vanishing in the darkness. The Englishmen carried me to the nearest seaport, and the American consul there forwarded me to Boston.

What happened in the City of Brass after my sudden and unexpected departure, I have no means of knowing. I entertain hopes, the hopes of a lover, that the rioters meant no harm to the queen nor to Rose in Bloom.

Harrison, the wisest philosopher that ever got into trouble, the truest philanthropist that ever made mischief, is, I fear, defunct.

If he lives, we may be sure that the City of Brass has been extricated from the familiar quagmire of its Past, and is making for that other and unknown quagmire, its Future.

THE EGOTIST IN LIFE.

OF the egotist as he shows himself in life, we do not propose to spend time in logical explanation, for the word "egotist" itself is its own best definition; every person is more or less an egotist; and the egotist is therefore, in some sense, as manifold as human individuals,—but we shall speak of only a few marked examples.

The egotist of the lowest order is one that we may call the sensual egotist,—one who combines self-assertion with self-indulgence. The sensualist is intensely selfish, but mere selfishness does not constitute an egotist. The sensual egotist adds to his selfishness a certain conscious and obtrusive personality. The character of the egotist, even when manifested morally, intellectually, and in connection with worth and talent, is unpleasant; how repulsive then must it be when it appears in the devotion of an individual to his own personal importance, and to his own physical satisfaction or convenience! This character, however, is not an uncommon one. Away from conventional restraints, such an egotist lays aside the ritual of civility, which common custom obliges him to observe where he is known; when he can securely do so, he despises humane observances, and violates the goodly charities of intercourse, for which such observances are socially the sacraments and signs. This innate *savage* seems to take for granted that, beyond a very limited sphere, the law of courtesy has no force, and he emancipates himself from the slavery of decorum. Strangers, he assumes, have no obligation of mutual concessions, of mutual deferences; the base instinct seems to rule him, that the individual must only take thought for himself; that he must have no care for others; that he must secure to his own peculiar share some advantages which are as prey to the hunter and booty to the fighter. True,

it is only amidst throngs and the unknown, that one observes in any reputable man this gross egotism, which had lurked within him. The sensual egotist might seem, at first view, possible only in the coarsest character; as in the drunkard, in the glutton, in the tavern bravo, or in the domestic tyrant. But the sensual egotist may be found in very fine apparel, very fine houses, very fine society, and with manners that are called very fine. We shall however take an instance of the character differently circumstanced. If the man that we select ever had these advantages, he has them no longer. He is now threadbare and out at elbows; but he is not mortified or despondent; he knows of neither repentance nor regret. Appetite and self-conceit make in *him* the man; but no abasement which brings gratification to his appetite lowers or wounds his self-conceit. He may be comic to the thoughtless,—he must always be tragic to the wise; he may make the groundling laugh, but he must make the judicious grieve; he may be witty or he may be dull, but he is deeply pitiable; a truly melancholy object, whether he be "old Jack Falstaff" or old John Smith,—for invariably such an egotist is *old*. There is a kind of originality in his manner of being old: he is old with a vigorous and stanch permanency, with a determinate and obstinate persistency in life, with an easy indifference to the force of time, and with a derisive and practical opposition to all the common theories of health. According to the average of ordinary mortality, he ought to be near the grave, or in it; but the seasoned old reprobate boasts that he has another score of years in him. According to the infallible teaching of Dr. Newfangle, it ought to have been impossible for any one with the habits of this man to live twelve months; but the irregular old wretch maintains his strength, in most irreverent indifference

to science. He is not a person of whom any one ever says, "That good old man," "That excellent old man"; he is mostly referred to as "old boy," "old chap," "old scamp." And yet in his own opinion, if there is a man in the district pre-eminent for solid understanding, strong sense, rational views of life, for a correct estimate of morals, and consistent ideas of religion, he is *that* individual. He is no transcendentalist. He likes the real. What good does poetry do a man? he asks, with a triumphant air. Will it make corn grow, or will it feed the cow? "I go," he says, "for the practical. Yes, sir; I stand up for the practical." Yet he has depended all his life on the industry of others. In the same manner he is in favor of plain speaking, and of calling things by their right names. When he wants a glass of strong waters, — and he wants it very often, — he does not ask for a minute measure of alcoholic essence; he never speaks of it as the chemical result of the distilling-alembic; he does not refer to it as balm-bitters, cordial, or restorative; he simply asks for rum, gin, whiskey, brandy, or whatever, at the time, has his preference: he does not take it as a medicine; he does not plead a weak stomach or faint heart; he begs for no allowance on the ground of miserable nerves, or a tendency to languor; if you press him closely he will candidly admit that he takes it because he likes it. But then he takes it only in moderation. His maxim, he insists, is, "Use all things temperately"; and he quietly avers that such has been the invariable rule of his conduct. He hates excess, he despises a sot; no one can say that *he* was ever the worse for liquor; he is always master of his senses and of himself; no, no, he knows better, he is able to use God's gifts without abusing them. In much of this he tells the truth: he is never intoxicated, — *that* condition has become with him an impossibility; he is so soaked and seasoned that stimulant has no more effect on him than water has on saturated timber. Your genuine toper is never tipsy; between stimulant

and his constitution there is a natural affinity; and this finely balanced co-ordination brings him to a stout old age. It is the man of nervous and sensitive temperament whom stimulants make mad; he becomes a drunkard, and if not quickly changed is quickly ruined, or quickly killed. The character whom we have under consideration drinks as much as would kill twenty ordinary individuals; but one rule of prudence he does observe, — for what he drinks he rarely pays. He prides himself, as we have said, on his understanding, his sense, his experience; so he is always ready to give advice, to show to the foolish the path of wisdom, to caution the thoughtless, and to hold back the rash. Yet his own sons have gone headlong to destruction. He can tell you the points in which this man or the other committed serious errors, that he, in their place, would have avoided, or would speedily have corrected; but his career, while he had one, was a succession of blunders. He can enumerate an endless variety of plans, by any one of which a man could make his fortune; but while he was himself concerned in any business, his condition might have been called one of chronic failure. He patronizes religion, but he denounces mystery. "Give us," he says, "plain truth. Show us the clear path of which it is said, that 'wayfaring men, though fools, shall not err therein.' Give us wholesome and simple preaching. To what purpose are these abstruse doctrines, these out-of-the-way and long-winded sermons? Short and sweet, I say, and what every one of common sense can understand. I want the preaching that goes direct to a man's conscience; that is what I want; and if the parsons don't give it, why, then, don't pay them, that's my advice. Practical religion, that's what should be preached, to teach us how to visit the widows and the fatherless in their afflictions" (but he visited only such places as gave him hope of good eating and much drinking); "to teach us to be true husbands" (he worried successively the lives out of three wives); "to be affectionate par-

ents" (his children became a prey to ignorance, vice and crime); "to be good neighbors" (with him neighbors were good for what could be had by them). He is quite as opposed to missions as to mystery. Charity, he holds, should begin at home. "Why," he inquires, "should we send moral pocket-handkerchiefs and flannel petticoats to little niggers in the West Indies? have n't we poor enough at our own doors? Why send parsons to the tropics and the poles? are there not heathens enough around us?" Certainly; is not he himself one? and has he not by his own neglected family added to the number? He detests fanatics; and all are fanatics who ascribe reality to aught which is not within the sphere of sense and self. Earnestness, zeal, enthusiasm in any way, is his abhorrence, whether in religion, morals, politics, or philanthropy. "Let us," he urges, "have peace, order, law, worthy citizenship; let every man mind his own soul and his own business, and then all will be right; households will be quiet, communities will be at peace; governments will have no corruption, nations no disturbance, churches no divisions: in fact, sir," — and he kindles with his own excitement, — "in fact, sir, it would be the millennium, yes, the millennium, sir; that's what it would be, if these rascally fellows who want to turn the world upside-down would let us have it. They ought to be hung, every mother's son of them; if the advice of men like myself, men of sober common sense and sound practical experience, were taken, this would quickly be their fate; then we should all be united in brotherly love and charity the rest of our days — but this talking, sir, is dry work. The windpipe, sir, like every other wind-instrument, constantly needs wetting; and now, sir, as there is a pause in the music, let us moisten and tune up." Here is a man, living in the lowest and meanest condition of his nature, merging all his desires into debasing gratification; perverting his faculties to the basest servility and sycophancy for the sake of that enjoyment: and

yet he has no sense of humiliation, no inward suspicion that he is worthless; he is self-sufficient, self-satisfied; and, dismal wreck as he is, dismal wreck as whatever belonged to him has become, he is nothing shaken in his own esteem: all, besides himself, were wrong, and he alone was right. We have drawn this character with accessories of indigence, but the character exists in every station, and in all grades of poverty or of wealth.

The vain egotist is the form of the character which we now present; and for illustration we pass from the dram-shop to the palace, and from a loafer to a king. Is this transition too abrupt? According to outward condition, it does indeed seem so; but in human nature itself there are no such chasms as appear in its external relations. The real kings are few, and it is not often that one of them wears a crown. Take the crown away, and commonly it leaves no king behind, — not always the average of a man. Educated and circumstanced as royal personages usually are, it is hard to be a king and not be an egotist and vain. Sometimes, however, an inborn constitutional greatness triumphs over education and circumstances; at other times the individual is an egotist and vain, even superlatively beyond the natural influences of his education and his circumstances. Louis the Fourteenth was in the highest degree such an individual. But in George the Fourth of England we have an example nearer to our own times, nearer to our apprehension, and more in affinity with our manners. Perhaps no man ever went beyond George the Fourth in the combined forces of vanity and egotism. He was full of himself, and always satisfied with himself. Even in the sad and solemn gloom of his last illness, after his long life of unprincipled private and public conduct, of measureless excess and heartless licentiousness, he gave himself credit, while conversing with the attendant bishop, of having had constantly the best intention, and of having never injured any one. In the idea of

himself he included his privileges, his prerogatives, and particularly the advantages of his person. Deeper than all, there was in him a cold and severe consciousness of his regal station. No prince ever had, as he, the mystic secret of being at the same time a monarch and a scamp. The celebrated Prince Hal, when he became a monarch, ceased to be a scamp; but George the Fourth neither relaxed the demands of his royalty nor stopped the career of his debaucheries. It was by presenting his carelessness as real that he so thoroughly outwitted his most intellectual servants, and made them so effectually his dupes. He wished all that he was, all that he had, all that he could control, to minister to his lusts, to his power; and in no small degree he attained his wish. And this sagacious man, of considerable accomplishment, and of more than ordinary talents, was vain of being called the first gentleman in Europe, and desired to be thought the handsomest man in England. How utterly ludicrous such a character may be, when divested of imposing associations, we see in the burlesque of it by Mr. Dickens, in *Turveydrop*, — "old deportment," — the most amusing, the most laughable caricature in literature, but at the same time a genuine likeness and an impressive moral picture. But George, when alive, was not to be ridiculed with impunity. Of this, Leigh Hunt had bitter proof, when George was yet Prince Regent. The Examiner, in giving an account of a St. Patrick's celebration in London, — at which the name of the prince was angrily received, — takes the opportunity to denounce both the policy of the Regent and his character. In the course of the article, the writer, Leigh Hunt, selects certain phrases of fulsome eulogy, with which journals in the interest of the Court abounded: such as, "You are the glory of the people"; "You are the protector of the arts"; "You are the Mecenas of the age"; "Wherever you appear you conquer all hearts, wipe away all tears, excite desire and love, and win beauty towards you";

"You breathe eloquence"; "You inspire the graces"; "You are Adonis in loveliness." "What person," says Hunt, "unacquainted with the true state of the case, would imagine, in reading these astounding eulogies, that this 'glory of the people' was the subject of millions of shrugs and reproaches! that this 'protector of the arts' had named a wretched foreigner his historical painter, in disparagement or in ignorance of the merits of his own countrymen! that this 'breather of eloquence' could not say a few decent extemporary words! that 'this exciter of desire,' this 'Adonis in loveliness,' was a corpulent man of fifty! — in short, that this delightful, blissful, wise, pleasurable, honorable, virtuous, true, immortal prince was a violator of his word, a libertine, over head and ears in disgrace, a despiser of domestic ties, a companion of gamblers and demireps, a man who has just closed half a century without one single claim on the gratitude of his country or the respect of posterity." Hunt, with his brother, who was a joint proprietor of the Examiner, paid the penalty of such audacity in two years' imprisonment and a fine of a thousand pounds. "It is understood after all," says Hunt, forty years subsequently, in his autobiography, "that the sting of the article lay not in the gravest portion of it, but in the lightest, — in the banter about the Adonis and the gentleman of fifty." But Hunt, if we remember rightly, does not here tell the whole story. After his release, he wrote an article retracting his former assertions concerning the prince, and declared that his Royal Highness "was *not* corpulent, was *not* fifty, and was *not* an Adonis." The attorney-general gave a threatening hint. Hunt then retorted that his was a hard case; for when he said that the prince *was* corpulent, *was* fifty, and *was* an Adonis, he suffered persecution and punishment: now, for saying the prince was *not* such, he was again ominously admonished. In this strife between the prince and the poet, each had a bitter share. The prince winced at the

laugh; the poet came under the lash: but which inflicted the severer wound I will not say,—the laugh of the public on the vanity of the prince, or the lash of the law on the welfare of the poet.

Sensual, vain, and egotistic, however, as George the Fourth was, he had kindly qualities. In the coarse meaning of the word he was never cruel, and to those in his immediate service he was a gracious master. Persons in this relation were affectionately attached to him, and invariably spoke well of him. A young physician who attended a gardener of his in a long illness told us that the king when at Windsor called daily to see the patient; that on one occasion he, the doctor, met the king at the sick man's cottage, and was drawn by his Majesty into very familiar and very pleasant conversation. We may hope that, besides his evil deeds so widely known, he did many good ones of which the world has never heard. We are moreover to bear in mind that, if high position sometimes causes a man's right actions to pass for more than their worth, it as often brands a man's wrong actions with more than their guilt. We have known within the sphere of private life conduct compared with which this king's was almost excellence, and yet it went unwhipped of justice, even the justice of social reprehension. Within the shadows of obscurity and mediocrity, we have witnessed such malign combinations of egotism and vanity as made credible the worst statements of history concerning wickedness in royal and imperial station. Characters we have met with, whom we dare not depict, for the intensity of feeling which the mere memory of them excites might cause us to do humanity itself injustice. In elevated circumstance or lowly, the character that is, or can become, the one most to be dreaded, includes within it the elements of egotism and vanity. Egotism may, indeed, be trivial and harmless, but it also can be obstinate and merciless: vanity may be gay and easy, but likewise it can reach down to the gloomiest depths of evil, and

call into action whatever in man is most hating and most hateful. When egotism gives concentration to vanity, and force of will gives it energy, and position of command gives it power, and dark jealousies render it suspicious, and stern temper makes it fierce, there is no invention of inhumanity, no cruelty of tyranny, no abuse of nature, that it cannot conceive, contrive, and execute. When we come to learn this, Domitian is intelligible to us, we do not wonder at Henry the Eighth, and even a Robespierre is almost natural.

Another form of the egotist we may term the pedantic. In this character we have the exposure of self-consciousness and self-importance, in connection with some peculiarity of study, attainment, talent, or pursuit. It is very difficult for any man not to be in some degree a pedant: for *that* is a rare man who is mentally, morally, practically, socially, so cultivated and so wise, as to estimate justly what he is, what he knows, what he does, and with the estimate to harmonize unobtrusively his several relations to mankind and to life. Pedantry, which is in itself a species of egotism, always implies intensity and limitation; and these it is hard for any of us to escape who are in earnest,—partial as most of us are in our acquisitions and activities. Accordingly, the pedantic element in a man, do what he may, becomes self-revealed. Though a man speak never of himself, or of what is personally associated with him, the selfhood of his mind will be not the less plainly made known; it will be seen to be a consciousness in his silence or his talk, in his motions or his rest. This will be peculiarly the case with men whose work is *in* the mind, *by* the mind, and *on* the mind. Among such we include both intellectual and æsthetic workers. In some of these the speciality is more marked than it is in others. See a particular man: as he walks along the street you say to yourself, "That man must be such a one, the poet; if he could be left alone with his own genius, he might possibly escape this manner-

ism": but he will not be so left alone; self-consciousness is excited, pleasantly to some, painfully to others, by the consciousness of being observed; *and the inevitable result is mannerism.* Another man you have never seen, possibly never will see; still you get an impression of him: he has written a history of the Hottentots, and he has become so coupled mentally with the history, that the history always suggests the name of the man, and the name of the man as inevitably suggests the history. It is usually assumed that the author has exhausted his subject, and that after him no one else has a right to express an opinion about Hottentots.

But it is in men of more isolating and peculiar occupations than general literature that pedantic egotism the most reveals itself. Of men engaged in academic professions, of men devoted to special and abstruse studies, of men enthusiastic for certain sciences, few escape at least the appearance of it, — except, it may be, Frenchmen; but French society is quick to resent assumption, alive to the ridiculous, not very patient with individuality, and altogether intolerant of oddity. Artists, also, in their way, are egotistic and pedantic; but it is in a different way from that of the scholar. The artist resembles the scholar in this, that he works within a region of difficulty into which the common mind never enters; but he differs from the scholar in the fact that, when his work is done, it is the common mind it must affect. The work of the recluse scholar is more intelligible to the mass of men when it is done than it would have been while it was in progress; and, as only his peers can understand the means, they only can decide on the issue and the end. The pedantic egotism of the artist is eccentric, but yet ardent; and, while it seems to despise the popular judgment, it has a passionate desire for the popular sympathy. For popular sympathy is the life of art, and want of it the despair of the artist. But as the scholar does

not necessarily require the sympathy of the community with his results, and as he is even more independent than the artist of their opinion on his modes of working, his pedantic egotism is shy and seclusive; generally it is that of superlative indifference; and to this he sometimes adds the superlative folly of thinking any other than his own objects unworthy of serious consideration or of intelligent respect. The pedantic egotism of the speaker combines that of the intellectualist and the artist, — it is subjective like the one, objective like the other. The subjective he tries as well as he is able to keep entirely to himself; and, if he can, he especially conceals it from his audience. In this effort, he at times goes a little too far. It is not always easy for an audience to believe that the orator who stands before them thinks really as humbly of himself and as awfully of them as he says he does, or that he would dare to ask their most serious attention to a person whom he held to be hardly worthy of it. If he were really unworthy, he would be the last man to know it; if he knew it, he would be the last man to say it.

Clerical speakers are not behindhand herein; and this is natural. As they have to create their own topics, and, independently of outward occasion, to excite interest in their topics, the process of composing a sermon must be a continued process of self-concentration and of self-exhaustion. It is not surprising that the *ego* should be continually present and continually expressed. Then the speech itself is guarded from contradiction, and secured against open criticism; the pulpit, *separate* from the body of the church, not only in locality but in idea, is sacred against outspoken objection; and the words of the sermon, falling upon the stillness of reverential silence, are only less sacred than those of the Bible. The man is entirely left to himself. He has no open combatant or rival, by whom his force may be tested. The poor, neglected actor has to silence the groanings of his heart, while shouts of rapture hail

the demigod of the night; if any vain illusion gives the despised one hope, theatrical audiences are not guilty of the deception. So, in the contests of the law, the orator takes high position only through victory over opposition. But the feeblest preacher that ever drained away the sublimity of his text may mistake his isolated personal intensity for force. The gentleness with which the devoutly meek listen to him he may consider impression; and the stolid firmness with which the inattentively reflective *seem* to listen he may suppose conviction. Then the good man at the end is tired and triumphant. No one tells him differently; and often he will not himself think differently, in spite of all that events declare too plainly and too severely. How naturally, then, does the preacher, who works hard and earnestly, think, without ordinary means of comparison, that he works with eloquence and power; how natural that he should rejoice in the illusion! "Ah, you were not at church to-day," said a preacher to a friend, whom he met after service coming in an opposite direction. "No, sir." "I am sorry," replied the clergyman, "for I never in my life preached better. O, it is hard to move these rich fellows; but sometimes a man can shake the hearts in them. My dear friend, you should have heard my sermon this morning on Dives and Lazarus!" But egotism in strong preachers is even strengthened with their strength. There is no man whose personality attracts so much the personality of others towards him as does that of the popular preacher. His personality is thus turned back upon him, through the kaleidoscope of a manifold reflection from the admiring personalities of others, with a warmth and intensity of coloring which no other orator ever calls so constantly into play. Struggling thus with his own personality and with the personalities about him, the moments of his emancipation from both must seem to him as miracles from Heaven.

Lecturers are akin to preachers; the transition is immediate from the preach-

er to the lecturer, and both can be easily combined in the same individual. What I have said of the popular preacher will, therefore, with slight modification, apply to the popular lecturer.

Pedantic egotism is a danger which peculiarly besets the self-educated, the half-educated, and the over-educated. The self-educated and the half-educated may escape it, but the over-educated never. The self-educated, or rather the self-taught,—for education always implies the ministry of others,—are likely to exaggerate the value and amount of their knowledge, and their manner of acquiring it has a natural tendency to render them intent on self. Under God they have but themselves, in regard to what they know, to think on or to thank. The labor has been unaided and their own. Thence, it has been more than commonly difficult, because done without the ordinary helps; and also difficult because usually it has been done irregularly and out of season. The self-taught seldom begins his culture in childhood or early youth,—the proper season for preparatory discipline. He commences his efforts when his faculties have become rigid, and he is toiling at the elements when others are masters of their most elaborate combinations. And rarely can he pursue his studies with any continuous application. In most instances, he has already begun the toil of active life, and his opportunities of study therefore are for a long time limited to such intervals as he can steal from work and from sleep. That he should hold precious attainments bought at such a cost and conquered by such a fight is very reasonable; but, none the less, his estimate—tested by a larger comparison than his own—is apt to be a mistake, and in excess: the average he will possibly mistake for the extraordinary, and the extraordinary for the marvelous. But let his estimate be ever so moderate or ever so fair, the peculiarity of his circumstances stamps his character; and that man is indeed a wonder who does not manifest the

peculiarity in an inordinate intellectual self-esteem. Other men of equal powers and of more knowledge are saved from this, not because they are humbler or wiser, but simply because their training has been regular; it has been so gradual and so orderly as not to be separately distinguished in the mental life, or from the common stock of consciousness.

The self-educated man, however self-regarding or self-assertive, is generally in faculties a strong man; he may in knowledge be a compact man and a complete man. But the half-educated man is in faculties but partially developed, and in knowledge is crude, loose, unstable, and uncertain. He has no centre to his mind, no government over his thoughts, no formed habit of reflection, no sequence or law to his opinions; and if he has talents they are without unity, order, or persistence. He is in most instances a man of mental capers, changes, and phantasms; of this project to-day, and of that plan to-morrow; announcing each succeeding and abortive whim with an air of oracular authority. A smattering he has of most things which can be picked up along the beaten paths of information, and even these he has rather from hearsay than from inquiry. He never hesitates, he is never in error, is ignorant of nothing, and is at a moment's notice prepared to discuss any subject, — books he has never read, languages he has never learned, sciences he has never studied, pictures he has never seen, music he has never heard; all are alike to him, — all theories, theologies, history, literature, philosophies, — all that the mind of man has created or conceived, from the visions of Plato to the dreamings of a child, — all that the visible universe displays, from the splendors of the milky way to the tints on a butterfly's wing. Prompt and bold, he has a word on all, alike secure in the audacity of ignorance or in the conceit of knowledge.

Such a man, however, if not in himself admirable, is in some degree amusing; but the over-educated man is in

every way intolerable. But who is an over-educated man, or how can a man be over-educated? The epithet, we admit, seems strange, and we will explain it by an illustration. We speak of over-dressed people; and in this way we speak now of the over-educated. The over-dressed attract attention to their costume; the over-educated attract attention to their scholarship. The over-dressed are showy out of place and out of season; so are the over-educated. The over-dressed are more remarkable for the gaudiness of their apparel than for its wealth; so are the over-educated more distinguished for the glossiness of their acquirement than for its solidity. Both are deficient in the sense of congruity, of appropriateness, and in the modest graces of taste and nature. Both make that supreme which is merely subordinate, that essential which is only incidental; and, as we regard the over-dressed, socially considered, underbred, intellectually considered we regard the over-educated as underbred. There are vulgarians in mind as there are in manners; and the over-educated pedant is a mental vulgarian; in fact, a literary snob. Upon a light soil of faculty, he obtains by cleverness and a certain ready aptitude a forced crop of scholarship, and this he grinds in the mill of vanity during life. He lives on the memory of small academical distinctions, and never rids himself of exultation at his success. He is enchanted not merely by academical distinctions, but even by academical accessories; he constantly babbles of the university at which he studied and graduated, — of its dignitaries and its dons, of its venerable institutions, and of the incomprehensible privilege of having resided within its walls. He delights in college jargon, thinks it the vilest ignorance to be unacquainted with undergraduate technicalities, seems to count for nothing the sound wisdom of thoughtful minds, compared with his own guesses at the meaning of a Greek tragedy. He never becomes intellectually a man, or puts away those

childish things which have dignity only as they prepare for manhood; he will gabble grammar to the last, and think his gabble learning: while he is young he will eulogize ancient classics, and write modern slang; be a purist in foreign tongues, but a corrupter of the vernacular: when he is old, he will exultingly declaim on the amount of knowledge he has forgotten, and never be aware how little he possessed which was worthy of remembrance.

Several other modifications of the egotist are present to our mind, but we can only hint at two or three in passing. One is the dogmatic egotist. This man evinces in every manner the sense of his own infallibility; even without speech, sign, or gesture, his simple look magnetically says, "I am never wrong; those who differ from me are never right." Of truth, as the highest object of thought, as the life and worth of all knowledge, as divinest reward of humble and sincere inquiry, as the light of eternal and infinite Intelligence which shines impartially into every soul disposed for communion with that Intelligence, — of truth thus regarded he has no idea, and for the reception of it he has no capacity. The whole of his mental force converges into will; and will, made absolute, rules despotically over all the other faculties. However powerful the other faculties in themselves may be, they have no freedom or independence; they may work with vigor, but they work as slaves. They are but subservient ministers to individualized assertion. In mental contact, therefore, with such an egotist, there is no longer any intercourse of reason, or logic; argument, deliberation, balancing of thought, mutual comparison or concession, there can be none; persuasion or conviction becomes impossible; and nothing remains but categorical statement on the one side, and categorical denial or assent on the other. The mental relation in such a case resembles the bodily relation of two persons who approach to shake hands, but one of whom will not bend

his fingers: if the other follows his example, there is no grasp; and even if he does not, the grasp will yet be only partial. With the dogmatic egotist the method is the same, whether he be ignorant or learned; the only difference is in the sphere and measure of assertion. Indeed, the method is in favor of the ignorant man; for, however self-opinionated, an informed and intelligent man may be shaken in his assertion; but the hardihood of ignorance is immovable and unconquerable. Nor is the dogmatic egotist different in character, whether he be believer or sceptic; he reconciles the farthest extremes of faith and denial, or rather in *him* they are identical, for he always believes in himself; of *that* self he never doubts. You meet this character complete in its unity in the most opposite philosophies, policies, creeds, churches, classes, and despite the most astounding and contradictory changes of opinion.

Another is the dictatorial egotist. This character is in manner what the dogmatic is in mind; and as manner is all that he has, he makes the most of it. What the dogmatic *is*, the dictatorial *seems*; and, as the outside of the dogmatic comes from the inside, the inside of the dictatorial is shaped from the outside. He intends his demeanor to be grand; so he thinks himself grand: he designs his accents to be weighty; he therefore fancies his thoughts weighty; but, while he tries to talk like Lord Bacon, he thinks like "poor Poll." He is commanding and patronizing in his airs; so he imagines that he carries within him a sort of hidden kingship, — a sort of inward masterhood that must be infinitely imposing. Is he of gravity philosophical? then is he the incarnation of philosophy. Is he of dignity theological? then, he esteems himself the personification of his creed or system. Even while confessing that he is the chief of sinners, he would be imperious; and were any one to dispute that precedence against him, he would be tempted to knock down his presumptuous rival.

But in the consciousness of spiritual security he is equally unbearing; he prays indictments against the unbelieving, frowns excommunications at the impenitent, and at the obstinately ungodly he looks daggers and condemnation. It is the same with him in business, in politics, in private intercourse, in all circumstances; his manner never fails to say, "I am Sir Oracle, and when I ope my mouth let no dog bark."

One other speciality we notice is the purse-proud egotist: and we wish here to distinguish the egotist vain of riches from the egotist proud of riches. The egotist merely vain of riches is often a very worthy and very lovable character. He has his foible, but it does not hinder him from having affectionate and kindly virtues. He enlarges on the value of his grounds, but then he pleasantly accompanies you through them, and is neighborly and generous with his fruits and flowers. He points you to the magnificence of his house, and gives you an estimate of the vast sum which the building of it cost; but then he does not shut the door on you, and there are occasions when you see the inside of it. On such occasions he possibly descants on the expensiveness of the furniture, the rarity of the pictures, and the unsupposable charges which he has paid for books of rare editions in his library; but then he does not coldly conduct you to the door and civilly bow you out. You have come to dine with him to find that he is as hospitable as wealthy, and that in his establishment there is as much substance as there is show. He intimates the prices and purity of his wines, but you share them with the buyer; and as their excellence justifies his boast, you can sincerely praise them. He complains about the enormity of his property tax, and thereby suggests the enormity of his possessions; but his heart is genial and his hand is open; liberal in giving, not too exacting in demand, and on every charitable occasion ready to follow the counsel of Dean Swift,—"to trust in the Lord and down with his dust."

The egotist proud of his riches is not a man of such a spirit. He is absorbed in what he owns, in the *ME* which owns it; and the bigness of this *ME* he measures by the bigness of its estimated worldly possessions. From that bulk downward, every other *ME* diminishes until some wretched *ME* at a few paltry thousands becomes utterly imperceptible. If you are at or *beyond* this vanishing-point, it is inevitable that he should take no notice of you, since you have not substance enough to be cognizable. Consciousness is determined not only by the capacities of action and apprehension, but also by the medium in which a creature lives. The fish knows nothing of existence or motion in air; the bird knows nothing of existence and motion in water: and so there are moral *media* which habit forms to mental conditions of being, almost as invincibly restrictive to consciousness as those that circumscribe animal conditions of being. According to this law, the man whose instincts and activities breathe and move only in the medium of wealth will find in that medium also the limit of his consciousness,—not the consciousness alone of his own importance, but the consciousness in degree of other men's importance; and as only through the medium of wealth he is revealed to himself, only through the same medium are other men to him revealed. As the idea of self-consequence after this manner is the least akin to all that in man is essential and immortal,—all that is spiritually innate and common to the kind,—it is, therefore, the source of a pride which is not only the most offensive, but also the most exclusive. The man whom it governs intrenches his soul in the centre of his possessions, and these are the panoply all around him with which he would prove his greatness to the world.

The demonian is another type of the egotist which we might have adduced; but it would have had no adequate discussion, and here it can be merely mentioned. To this type belong certain era-creating men stupendous in genius

and in will, each of whom makes the age in which he lives his own, and directs for the time the action of the world. A man so constituted by some subtle potency draws the forces of his generation into his own existence, and thus becomes an imperial and commanding personality. All are his, all are for him; but he alone is for himself and is by no man owned. He is authority to himself, and out of the consciousness that he is so he speaks and acts. Not by outward, but by inward birth is such a man a king; in a soul that is not only in itself strong, but that also can charm or command all other strength to its service, he has the sources of his power; in a mystery of sovereignty for which nature has no name, and philosophy no explanation, he has the secret of genuine kingship. That which makes minds his tributaries is that which gives him the reality of dominion: in this, and not in the blaze of conquest or in the pomp of sway, is his distinctive royalty. Such a man is born to subdue and rule, not to submit and serve; and though, as incidental to his destiny, he may fight battles, gain victories, crush all that oppose him from within, triumph over all that resist him from without, ordination to his office has been already authenticated in the speciality of his genius: the events which follow serve but to make his calling and election sure. The man is not because of the battles and the victories; the battles and the victories are because of the man: of these movements he is not the creature, but the creator. His end being always in himself, he is an egotist, but verily an egotist of Titanic structure. Transcending the standard of ordinary humanity, but not in character divine nor yet diabolic, we have placed him in the preternatural medium that lies between them, and defined his individu-

ality by the epithet demonian. To this type certain men at long intervals of time answer: among them we may name the Macedonian Alexander, the Roman Julius, the Arabian Mahomet, the Frankish Charlemagne, the English Cromwell, the Russian Peter, the Prussian Frederick, the Corsican Napoleon. If the demonian egotist tends towards the diabolic in character, the egotist element becomes gloomy and intensified: then, exceptional humanity shows itself; sometimes in a sanguinary conqueror, — an Attila or a Jenghis Khan; sometimes in an intellectual and pitiless tyrant, — a Tiberius or a Dr. Francia. If the demonian egotist tends towards the divine in character, the egotistic element is partially nullified in the expansion of broader sympathies, charities, and wisdom; if the divine *entirely* prevails in character, — religiously in faith, intellectually in philosophy, morally in practice, — the egotist is lost in the prophet, the apostle, the saint, the sage, the philanthropist, the patriot. When we consider by what numbers of these our nature has been glorified, to fail of trust, to cast away confidence, is to be feeble or to be guilty. Even within the narrow space of the human career which record or observation makes known, we are dazzled with the splendor of shining names, containing among them Moses, Paul, John, Plato, Howard, Washington, — men consecrated to their missions, either by sacred authority, or by genius, goodness, and heroism. Such men, — men of transcendent magnitude, — are those that in the mighty drama of history on the stage of Earth, through the shifting scenes of ages, are of the measure and the stature which render humanity sublime; the men in whose characters and energies all its faculties are aggrandized, in whose devisings and achievements its destinies are unfolded.

PARLOR SINGING.

THERE is no good reason why musical criticism should be almost wholly restricted to the opera and public concerts, and so little should be devoted to the music of the parlor. Parlor music is certainly of more importance than any other to our domestic and social enjoyments, and no less worthy of rational criticism.

But there are so many bad singers and so few good ones in the world, that many persons condemn parlor music as a "nuisance," unless it be entirely instrumental. Instruments, they say, admit of being well played by coarse and stupid persons, because they do not generally express the character of the performer; but nearly all vocalists are disagreeable. I admit the reasonableness of this fault-finding, and will confess that I belong to that class of listeners who agree in sentiment with the popular ballad entitled "The Musical Wife." Indeed I have always felt particularly satisfied with my own wife because she had omitted to add to her other accomplishments that of a musician; knowing how small the chance, according to the law of probabilities, that she would not by this additional talent have given me more annoyance than pleasure.

I have not, in the course of my life, heard more than two or three female singers who afforded me any considerable pleasure in solos. Ballad-singers, with a few exceptions, may be divided into two classes,—first, those who sing like children, with a bald and unmeaning simplicity, without any graces of expression and modulation; second, those who mix with their graces so much silliness or affectation as to spoil their performance. There is something entirely wrong in the musical training of young female singers; or there must be a very general incapacity among them for good singing. I have known some young persons whose perform-

ances were quite acceptable before they had been placed under a teacher and had learned to "vocalize." After this they were intolerable.

But though it is rare to meet with a young lady who can sing a good solo without spoiling it by her own airs, there are thousands who are very agreeable in concert, where the general harmony of voices conceals the defects of individual performers. I am sure that out of one hundred good choir-singers not more than two or three would be satisfactory in the performance of ballads. It cannot be denied that most of those who perform only in domestic circles make music a mere imitative art. They address themselves only to the ear, not to the sensibility. It is unfortunate for their excellence that they copy the style of operatic singers, which is as unfit for the parlor as the manner of a tragedian upon the stage is unfit for common conversation.

There are some men of distinguished ability who deny that musical power has any other than a very remote connection with intellect. They say that the most feeble-minded are often excellent in the art, and that many who are nearly idiotic possess a perfect musical ear. Blind Tom is given as an example; and they bring the additional proof that birds can learn to sing tunes, and sing them with accuracy. If we consider music as a mere imitative art, we may assent to their opinion; but, if we speak of it as the art of expressing the passions and sentiments by an original combination of sounds, their estimate is far from just. Music, in its highest meaning, is the language of emotion, and most of our emotions are intellectual. Hence a composer who is able to arrange certain sounds in such melodic movements as to call up at will any emotion, passion, or sentiment, either with or without the aid of words, or a performer who can enter into the spirit

of a good composition so as to perfect or improve the design of the author, is possessed of an intellectual gift that, intensified, would deserve the name of genius. But the simple power of learning to sing tunes, or to perform them with an instrument, as they are set, is only an exercise of the semi-intellectual faculty of imitation, and a fool may possess it.

As words are used to communicate certain definite thoughts, in like manner strains of music are used to communicate those shades of mental emotion which cannot be so forcibly expressed by words. Language conveys ideas, exact images, and forms of thought to the mind: music addresses itself to the mind through the sensibility. It is, therefore, in its highest exercise, an intellectual art, occupying the third place in the mental scale, and standing next to poetry, as poetry stands next to philosophy.

Joy is commonly expressed, in harmonic movements, by thirds, fifths, and octaves, such as are performed by a simple hunting-horn: it deals but sparingly in semitones and chromatic notes. Sorrow is expressed in strains that move, in great degree, by semitones and whole tones confined within a narrow compass. Take, for example, Rousseau's celebrated "Air Written upon Three Notes." Increase a plaintive melody contained within the compass of a major third or fourth, to strains embracing a whole octave, and progressing chiefly by harmonic intervals, and the effect is proportionally lively and exhilarating. I state only a general law of melody. A composer of genius would modify these transitions so as to make a seeming exception to this law, as in "Pleyel's Hymn." There are, however, no true exceptions to any law of nature: there are exceptions only to our imperfect statement or understanding of it.

It would be absurd to deny that one who has a knowledge of all this language of emotion, and who is able to use it effectively as a composer of music, is possessed of extraordinary intel-

lectual power. But it is a popular error to consider this peculiar faculty, which may be called musical genius, to be the same thing as a good musical ear. They are entirely different,—the latter being a faculty of sense, the former of intellect. It is not denied, however, that a good ear is needful for the manifestation of musical genius, as a good eye is needful for the manifestation of the genius of a painter or a sculptor.

I ought to allude in this place to the custom of judging female singers with so much greater severity than singers of the other sex, and to the remarkable fact that many persons cannot endure any but male vocalists in solos. Nobody would say that the voices of men are intrinsically as musical and agreeable as those of women. But we listen to a woman's voice as we look upon her face and observe her manners: a defect in either is more easily perceived, and is more disagreeable, than in the rougher sex. We prepare ourselves to hear a greater purity of tone—as we look for greater purity of character—in women; so that our severity of judgment is complimentary to the sex, though it may bear hard upon individuals. It cannot be denied that in a woman's voice all those slight intonations by which we detect shades of character are not only more perceptible, but affect us more deeply, on account of her sex. I must confess that I have seldom listened to female stage-singers with pleasure, because it is disagreeable to witness in a woman such masculine power of lungs as their success requires.

We should remember, however, that a singer's chance of pleasing by her performance depends greatly on the character of her hearers. A vulgar audience would be delighted with any exhibition that is calculated to excite either their laughter or their astonishment. Men who have not romantic ideas of the female character, and who would not readily perceive the psychological expressions of the voice, and all those persons, among the common herd

of musical practitioners, who cannot appreciate anything except mechanical skill, would not be affected by peculiarities in a singer that seem to a man of taste and sensibility positive faults. It may be remarked of singing, as of eloquence, that the less of intellectual culture there is among an audience, the less of any good quality except physical power is required to please. Coleridge, in his "Lines Composed in a Concert-room," expresses his abhorrence of the "gaudy throng," who listen with admiration as the singer

"Heaves her distended breast
In intricacies of laborious song,
These feel not music's genuine power, nor deign
To melt at Nature's passion-warbled plaint;
But when the long-breathed singer's up-trilled strain
Bursts in a squall, they gape with wonderment."

But my present purpose is not to criticise the concert or the opera. I leave that task to those who are qualified for it by a finished musical education. I treat only of the music of the parlor, which ought always to be of a simple but tasteful character, and which is spoiled when it either sinks into vulgarity, or attempts to accomplish feats that are within the power of those only who have given their life to the art and have been trained for public performance.

I must not omit to say a few more words upon what may be termed the *psychological expression of the voice*, to which I have already alluded. The voice of every singer, in a greater or less degree, conveys to us, according to the accuracy of our perceptions, an idea of the singer's moral and mental qualities. And this expression enters, more than any one would believe who had given no thought to the subject, into our estimate of vocalists, especially those of the female sex. Hence it may be explained why we cannot endure certain voices, however admirable in execution, unless their disagreeable psychological qualities are concealed by well-ordered instrumental accompaniments; as the strong flavor of certain kinds of game is hidden by sweet herbs and sauces.

The character of the voice also depends greatly on the physical organization; but this has been more generally observed. It is modified by the size and shape of the mouth as well as the manner of using it. If a woman's mouth be small, and her lungs weak, her singing-voice will sound like *cooing*; if her mouth be small and her lungs powerful, her voice will resemble *hooting*, making a hollow sound like that produced by blowing into the narrow neck of a large bottle; if her mouth and throat are both very large, her voice will have a *twang* like that of a negress, and approaching a masculine tenor. It may not have been generally observed that, in proportion as any race of mankind is cultivated and civilized, the difference in the physical power of the two sexes is widened. The male and female of the African race are more nearly equal in corporeal strength than the white man and woman. I have heard a negro man and a negro woman singing together, and, as I did not see them, I could not determine whether the duet was performed by two of the same sex or otherwise. The voice of a negro of either sex, however, has in all cases a *twang* peculiar to that race. It might be imitated by singing through a widely-flaring tin funnel.

The length and size of the neck produce important modifications of the voice. Soprano singers, for the most part, have short necks and high shoulders. Women with very long necks and sloping shoulders have contralto voices, almost without exception. Hence we may explain a fact which often excites surprise,—that many small and slender women have a low and deep-toned voice, which should be distinguished, however, from one of a masculine character. A symmetrical form of the neck and shoulders produces the mezzo-soprano, or middle voice, which is the most agreeable. All these different conformations of the mouth and frame give the voice its physiological character, which is also very considerably modified by temperament.

I would also call the reader's atten-

tion, before I proceed further, to the fact that in all departments of art there is a certain kind of genius that is not generally appreciated. The truth of this proposition can be best illustrated by examples from the performance of music. A singularly nice discernment is necessary to distinguish that sort of merit which consists chiefly in expression and modulation. The great mass of people, including the mass of critics and connoisseurs, can fully appreciate only two important qualities of a good singer, and have very little capacity for understanding those of a higher character. The two qualities of "execution" and "power" are easily comprehended, and obtain the plaudits of all; while grace, feeling, and expression are considered secondary to the others. The power of lungs is placed above the power of genius.

It must be remembered that "execution," used as a musical term, is applied almost exclusively to the faculty of rapidly enunciating the quick and difficult passages of a musical composition. "Power," in the popular musical vocabulary, is understood to mean physical or mechanical force. It is true that a singer, who, without superior compass or strength of voice, should be able to perform with exquisite grace and expression, possesses *power*, in a very important sense. But this is the power of genius, and is not included in the popular meaning of the word, which expresses only a capacity for great loudness and compass. It is applied to singers as to instruments, in the sense in which a bugle is more powerful than a flute.

The physical and mechanical powers are qualities that everybody understands, and, when extraordinary, admires; but genius is simply *felt*: it affects the heart and sensibility, but is not sufficiently palpable to be admired. This seems to be the characteristic of every age, and affects every department of the art. I read in a "History of Music" written by a Mr. Fergus, and printed a hundred years ago: "A great deal of the music of the *present day* is

calculated more to *astonish* than to *please*. Expression and simplicity are sacrificed to execution." "Mara and Billington often astonish the listening world by executing such rapid passages as were never but by them attempted; but, in these moments of surprising exertion, they sacrifice their judgment and wonderful abilities to the corrupt taste of the times." "Owing to the insatiable appetite of the multitude, composers of the first abilities are frequently obliged to rain down torrents of indigested compositions, which have nothing but novelty to recommend them." We might inform Mr. Fergus, if he could point out any medium of communication between us, that he has written a very good sketch of the taste of the present age in this description of the taste of his own. Admiration is the passion of vulgar minds; and any singer may easily excite this passion by the exhibition of great "power." Noise is preferred to melody, as evinced by the universal custom of performing on the piano with the pedals down and the lid open.

All writers have been prone to make a distinction between genius and talent, but no two have agreed in naming the qualities that distinguish them. Talent is generally admitted to be something that resembles skill and tact, corresponding with a quick and correct ear in the musical art. Genius, on the other hand, is supposed to be an original and extraordinary manifestation of intellectual power, and in the popular judgment is considered as relating to art, rather than learning or science. Great intellectual power in any shape, however, notwithstanding the various distinctions drawn by critics, will always be recognized as genius. A definition of the word cannot be made with such limitations as would please the majority of our sophists, without excluding some of the most wonderful persons who have lived.

It is well, however, to note this remarkable circumstance, that, when genius is ascribed to men of science and learning, intellectual power alone is con-

sidered; but when it is ascribed to poets or to singers, their personal qualities always affect our judgment, and cannot be disregarded. Genius is usually ascribed, in the case of poets, to those who have certain interesting traits of character which are deeply impressed on their works. So far, indeed, as poets are concerned, it is difficult to separate the idea of their genius from a certain *egoism* (a word coined by Lady Morgan), or impression of their own character on their poems. Among English poets whose works exhibit this quality in the highest degree, the names of Burns and Byron would first occur to the mind of every reader. Cowper and Wordsworth also possess it in a high degree; while no English poet ever manifested so little of this quality as Alexander Pope. Hence genius is often denied him, because his works are so entirely impersonal and cold. I should add that it is only when this *egoism*, or personal quality, is such as to interest our feelings in an agreeable manner, that it stamps the character of genius upon the author; and this remark applies to singers as well as to poets.

For more than a quarter of a century I had listened to female amateur singers, yet in the voices of all some important qualities were wanting, to render them agreeable. They were seldom without *egoism*, but it was generally offensive by taking the hue of *egotism* and vanity. I had heard voices in many a church choir that were agreeable in that place, and many that were very acceptable in music with several vocal parts. But I had heard no good ballad-singer, — no one who could give a simple song for one voice without spoiling it by some prominent defects. A female voice possessing the requisite qualities of tone, guided by a certain power of expression that should deeply affect the heart and penetrate the soul, was something that yet remained unheard.

There is a little bird in our woods, called the veery, which frequents the most solitary places, and has always

seemed to me the most charming songster of the forest. He is most musical at nightfall, just at the hour when other birds have become silent; and his song, consisting only of a few simple strains, is so brilliant and yet so plaintive, that no person who has once listened to it can ever forget either the song or the time and place in which it was heard. For many years I have annually, in the month of June, visited a wood frequented by this bird, to listen to his notes. No purer or sweeter tones were ever whispered into the ear of night; and I have often thought, as they fell softly upon my sense, that, if this little bird were metamorphosed into a young maid, I might hear in her voice the perfection of human song.

Many years ago I knew an amateur musician, who performed on the German flute in such a manner as to afford me a clear conception of this ideal voice which I had always sought for in vain. There were many flutists who would be rated by the prevailing rules of criticism far above him, on account of their greater power of exciting astonishment; but none of them could equal him in affecting the sensibility of his hearers, or come near him in a peculiar combination of tenderness and brilliancy. Did there exist, I had often questioned, a female voice that was capable of giving the same expression to a song, which this gentleman produced with his flute? I had listened to admirable qualities in many a vocalist, but still felt that in every one the most interesting and affecting quality was wanting.

Until the occurrence of the pleasant incident I am about to relate, I had been unable to explain to myself why so many female singers were disagreeable except in chorus, or why we are generally so much better pleased with male voices, though admitted to be far less sweet and melodious than those of the female sex. From my amiable heroine I have obtained many ideas of popular ballads and ballad-singing, which are singularly original and true. By her performance and her conversation she

has made me understand certain principles which I should not have learned from any other source; and by studying her likes and dislikes, which were perfectly systematic and consistent, I have corrected many of my early prejudices, and obtained some new views of musical criticism.

One summer afternoon, in the year 1862, when recovering from a protracted illness, I sat reading alone at my chamber window, and, as it grew late, I put aside my book and looked out upon the landscape. The evening was very mild and clear, and the weather so calm that I could detect any stirring of the wind only by the gentle flutter of the leaves of an aspen that stood near my window. The sun had so far declined as to impart to the whole prospect a bright golden hue mingled with a rosy tint, and the thin, gauzy clouds that floated over the heavens were luminous with beauty. My thoughts were all of pleasant themes awakened by the scenes before me, and I had given myself up entirely to the enjoyments of sense and imagination.

At this moment I heard the voice of a young female singer, — one who was unknown to me and whom I had never seen, — from the open windows of the house adjoining mine. She was singing a simple ballad, commencing with the words, "The sun was clear on the open lea." I had not heard many verses when I was affected as I had never been before by a human voice or by an instrument. There was something in her tones that seemed to be the very soul of melody, and a peculiar grace in the modulation of them that could not be described.

When she paused, my first thought was, that I must have been hearing a performance by some prima donna, who might be the guest of my neighbor. But when she began anew, I soon perceived a simplicity and *naïveté* about her manner that proved her to be no stage-singer. Her voice was unlike any I had ever heard, — so sweet and so plaintive that it seemed as if nothing on earth could equal it. Some of

Milton's descriptions of heavenly song flashed upon my memory; and I thought of the veeery, — the little bird whose vesper notes

"With liquid warbling close the eye of Day."

I remembered my former disappointments, but this voice realized all imagined delight. The invisible singer gave in succession many simple ballads without the accompaniment of any instrument or of any other voice. As her plaintive notes fell softly upon my ear, and then melted into silence, I felt that this was the ideal voice, which I had so long desired to hear.

I soon learned that the sweet singer was a very young lady, who had just arrived as a visitor in my neighbor's family. But what must be the delicacy and the firmness of her organization, that should cause her tones to be so sweet and so animated! What must be the depth of pathos in that young heart, enabling her to imbue with so much plaintiveness an ordinary ballad! What must be the sensibility that endowed her with the power to awaken such intense emotions in a listener!

The reader will naturally suppose that I desired to see the face of one who had so deeply affected me by her singing. Such a voice, I thought, could not belong to one who had a dull and insipid countenance. If not beautiful in feature, she must have something of that look which is superior to ordinary beauty. Day after day came and went, and I heard her from time to time pouring forth with the same clear voice those brilliant and plaintive notes, "most musical, most melancholy"; but still I had not seen her, and I thought at last, with a deep feeling of sadness, that there must be some divinity about her, and fate had determined that I was not worthy to behold her.

Meanwhile, I imagined she must have a very thoughtful face, on account of her plaintive style of singing. When, therefore, I met her at last in broad daylight, what was my surprise on beholding one of the most brilliant and

joyous faces I had ever seen! She was not generally considered handsome. She had very dark and full eyes, with dark hair, a skin rather light for a brunette, a small arched forehead (a very frequent accompaniment of genius), a handsome, generous mouth, and a fine set of teeth perfectly unblemished. She was very slender, about the middle height, delicate but firm in her physical structure, with a great exuberance of mirthfulness. Her manners were free and unembarrassed, though she blushed easily, and smiled and laughed a great deal when conversing. Though she entered readily into conversation, I soon discovered that she was not voluble, like most of her sex, and her conversation with those who were older than herself consisted chiefly in asking questions and listening to the answers.

I was also surprised when her friends informed me that she could not read a note of music, that she had received no musical instruction of any kind, had never performed in a church choir, nor much in any place with other voices. This was the more remarkable as her mental culture and education in other respects were excellent. She could sing five or six hours in succession, without repeating a song, and usually accompanied herself on the guitar, sometimes with the piano, extemporizing her accompaniments. She seemed entirely unconscious of her excellence as a singer, and was very incredulous when I complimented her, though, from fear of offending her, I did not express half my admiration. This was the cause of another of my surprises. Everything connected with her musical powers was mysterious, and I felt immediately a desire to make her peculiar genius my study.

I was not long in discovering that there was nothing commonplace in her manifestations of talent, and that she had some remarkable peculiarities; but of these I will speak by and by. Her ear was perfectly accurate; but, as a perfect musical ear is very common, she had in this respect thousands of

equals. She could learn the words and music of any song by hearing them once or twice; but, as such a memory is no uncommon faculty, she had in this respect also a great many equals. What distinguished her above all others was her power of giving to every song a delightful character which no one else could impart to it, and in many cases a sweet expression far beyond the merit of the composition. Hence, while she learned her music by her ear, she did not sing by rote, but performed every song with an exquisite grace and expression entirely her own.

Her voice was only moderately strong; but her power of sustaining it and her distinct enunciation both of the words and the notes of her song were extraordinary. She was generally overpowered when singing with others in concert; indeed, in a chorus, or in any piece containing several vocal parts, she had many superiors among ordinary singers. It was also remarkable that when she sang in a duet, or when another person took the same part in unison with her, the beauty of her modulation could hardly be perceived. It was necessary that she should sing alone to be fully appreciated, and that the instrument that accompanied her voice should be played by her own hands. A certain *ad libitum* must be allowed her for the perfect display of her own graces.

In compass, her voice was deficient: it was a limited mezzo-soprano, and one of its peculiarities was the want of any appreciable falsetto. The note at which most soprano voices break into the falsetto is D or E, and a great difference may be observed in the facility with which different vocalists slide over this transition note. Having no falsetto, she could not sustain her voice well above E, and generally pitched her tunes a tone and a half or two tones below the key in which they were written; but she could not reach the low notes of the alto. Perhaps the sweetness of her voice was improved by its limited compass, causing her to pay the more attention to expression. Indeed, I

have always observed that voices of great compass are deficient in what Dr. Burney calls "flavor."

I have introduced the subject of these remarks, without her consent or knowledge; partly to illustrate that kind of genius which is more deeply felt than admired, but still more to avail myself of the opportunity of weaving into this essay certain ideas in musical criticism, derived from her example and conversation, that seem to me both original and just. Her manner in performing, and her ideas of music, I considered particularly worthy of study, because from her earliest years she had been so entirely self-reliant in the formation of her taste and style. I thought I could perceive in her genius a purer transcript of nature than in one of equal gifts modified to a greater extent by musical education and practice in concert. Even her peculiarities had their foundation, not in caprice, like the whims of most young persons, but in her intuitive conception of certain fundamental principles of music.

It was very perplexing to my philosophy, when I considered her plaintive style of performance, to learn that she held in detestation almost all songs and airs in the minor mode. With some rare exceptions, the only cases in which she could endure the minor key were single strains introduced to vary a somewhat lengthened melody in the major mode. I was also disappointed when she mentioned her dislike, amounting almost to contempt, of all *genuine* Scottish melodies, which I had always admired. She was pleased with many of the *new* Scottish ballads, by modern composers, which are of an entirely different character; but nothing could persuade her to sing any one of the legitimate Scottish airs, such as "Highland Mary," "John Anderson," and the like, unless to burlesque them. She was also averse to psalmody in general, though some of her favorite songs were of a religious character. She admired "Flee as a Bird to your Mountain," though it is partly in a minor key, and "Jephthah's Daughter,"

which, though a monotonous air, she sang with a charming expression.

I discovered also that many other songs, which were favorites with the public, were disagreeable to her. Knowing from her temper of mind (for, though unconsciously a little eccentric, she possessed no odd or satirical humor) that she did not spurn them on account of their popularity, I concluded that they must have certain qualities in common, which differed from those of her favorites. With her aid, therefore, I made a list of both classes of songs, in order that, by comparing the two, we might discover the qualities in their composition that distinguished them. By this comparison it appeared that the tunes which excited her aversion were extremely rhythmical in their movement, while her favorites were of an opposite character. All music has something of this quality, which is a part of its nature; but many tunes have a sing-song regularity in their measure, that soon becomes tiresome to a keen and practised ear. The rhythm or swing, for example, is more apparent in the popular ballads of "Bonnie Doon," "Long Ago," and "The Troubadour," than in the songs, "By the sad Sea Waves" and "When the Swallows homeward fly."

Most of these rhythmical tunes are very expressive: I mean that the sentiment they convey is easily perceived. They also strike the general ear as the sweetest music; and, as they require no extraordinary skill or genius in the performer to bring out their expression, they are very popular, and are sung oftener and by a greater number of persons than any other tunes. Miss — prefers that music in which the rhythm is partially concealed by a certain irregularity of movement, which requires a keener perception to understand its expression, and more vocal skill to make it apparent to others. There are platitudes in music as well as in eloquence and poetry, and she is very sensitive to the depressing effect of all such passages. Hence her decided aversion to some of the most popular songs.

I will confess that before my acquaintance with Miss — most of my favorite songs were of a class that she disliked, and her favorites were songs in which I had not previously detected any peculiar merit. I had a particular fancy for the old Scottish ballads which she despised, and many of the German airs, which she admired above all others, seemed to me to contain no meaning. I could not avoid the conclusion, therefore, until I discovered the reasons for correcting my judgment, that she was deficient in taste. After I had become familiar with her favorite music and her manner of performing it, I was convinced that my philosophy had failed to discover what was perfectly clear to her genius.

According to the principles on which her taste was founded, our popular ballads may be arranged under the following heads:—

First. All those tunes which, according to the ancient division of music, would be included in the enharmonic scale, as distinguished from those in the diatonic scale, which is our major mode. These songs are in the minor mode. They are mostly plaintive and melodious, but, like some of the old Scottish melodies, soon pall upon a sensitive ear.

Second. Songs with a very measured cadence,—singsong airs in which the rhythm, or swing of the movement, is not sufficiently varied to conceal its uniformity. This sort of music may have considerable sweetness; it is easily performed, and cannot be much improved by a superior style of execution. The popular ballad of "Long Ago" is a good example of this class.

Third. Songs by ordinary composers, which are neither intrinsically melodious, nor capable of being rendered so by a superior vocalist. The songs under this head are full of musical platitudes and plagiarisms. The world is flooded with them, and they are often very popular for a season on account of the sensational character, and sometimes the real merit, of the words attached to them.

Fourth. Tunes in which the rhythm is not formal or very apparent, and which do not at first, except to a practised ear, seem to be either musical or expressive, but which are extraordinary in their effects when their character is brought out by a superior performer. Most of the favorite songs of Miss — were included under this fourth head.

It might be supposed from her extremely fastidious taste, that not many songs would find place among her favorites. But we should bear in mind that it would occupy any man's attention several days to read the titles alone of all the songs that have been published with English words during the present century. This multitude, even if only one in a hundred be worthy of preservation, affords us an opportunity to select a considerable number of good ones. Although the ballads with which Miss — was familiar were hardly to be counted, there were about a hundred which she acknowledged as her favorites. These I copied into a book for her use, and with her assistance arranged them under twelve different heads, classifying them according to the sentiment conveyed by the words of the song. While, therefore, the music is, in most cases, in accordance with the words, the classification is of a literary rather than a musical character:—

1. *Songs of Cheerful Humor:* containing an animated sentiment or an account of some comic or happy incident; as "The Herdsman's Mountain Home," "The Musical Wife."

2. *Songs of Home:* conveying a direct appeal to our love of home and to its domestic scenes; as "Home, sweet Home," "Far away."

3. *Songs of Pathos:* founded on some pathetic incident, or awakening sorrowful images in the mind; as "The Captive Knight."

4. *Songs of Domestic Love:* involving a sentiment allied to that of home, but having particular reference to persons; as "The Bride's Farewell."

5. *Songs of Local Attachment:* re-

ferring to places or scenes remembered with a passionate interest; as "Ingle Side," "The Meeting of the Waters."

6. *Elegiac Songs*: celebrating our sorrows for the dead; as "Long, long, weary Day."

7. *Amatory Songs*: inspired by the sentiment of love, and which may be either plaintive or lively; as "Juanita," "Sweet Afton."

8. *Songs of Memory*: intended to revive the remembrance of the past, — usually plaintive; as "Oft in the Stilly Night."

9. *Songs of Fancy*: in which the interest turns on some imaginary incident; as "Araby's Daughter," "The Lake of the Dismal Swamp."

10. *Religious Songs*: based upon religious feeling, but not including psalmody or songs of praise; as "Flee as a Bird to your Mountain."

11. *Ethical Songs*: inculcating a moral; as "Love not." Very many stupid songs fall under this head, and a few very good ones.

12. *Songs of Absence*: songs of regret on account of the separation of friends or lovers; as "When the Swallows homeward fly," "The Carrier Dove."

I could not obtain from Miss — any commendation of the songs that grew out of the late war. Not one of them would she admit into her collection. The heading of Patriotic Songs, which would have added a thirteenth number to the list, was therefore omitted. Some of the other American songs were among her favorites; but she thought the German popular songs superior to those of any other nation, so far as her acquaintance with them extended. Although entirely self-taught in music, it is remarkable that she preferred the style of the best composers. She was very fond of the opera and of operatic music, though she did not imitate the stage-singers in her own style of execution.

In the course of my experience in making selections of music for private use, no fact has struck me so forcibly as the low and inferior character of the

popular music of bygone days. No man of taste would be a very devout admirer of the mass of popular songs of the present day; but the meanest of these surpasses the average of those which were popular in England, Scotland, and on the Continent of Europe, at any time before the present century. And if we trace to their origin those that possess genuine merit, we shall discover that they were taken from some opera or other. Indeed the best of the popular music of the present day is plagiarized or taken outright from the same source. It is the opera that must guide public taste to save it from running into the most ridiculous extravagance; and, so far as this rule is reversed, — so far as the opera and operatic compositions are adjusted to suit the taste of the millions, — in the same ratio does the opera degrade itself and become frivolous or bombastic.

One difficulty in the way of making a good selection of parlor songs is the unavoidable habit of identifying the words with the music. Some very poor tunes have been admired on account of their poetical words, as may be said of many of Thomas Moore's songs; and in other instances very ordinary verses have obtained higher credit than they deserved because of the good music that accompanied them. In making a selection, therefore, we are obliged to contend with our literary prejudices, in order to form a correct judgment of the music.

The music of the parlor would be much improved if it were more generally made the subject of refined criticism. But it has been left to the judgment of ignorant publishers to make selections for the family circle, and they have been governed by the vulgar taste for quartettes, quintettes, and choruses, so that genuine solo singing has been greatly neglected. Hardly a song has been composed or arranged lately, without that miserable appendage of a chorus, in which a multitude of harsh voices join to spoil the effect of the song, as surely as it is well performed. There are certain songs, es-

pecially of a comic sort, in which the chorus is an important part; but after a serious or plaintive ballad it is in most cases absurd and offensive. Many a time, when the chorus has been introduced after a song by an agreeable performer, I have thought what might be the effect if all the beasts of the field were to fill with their roaring each pause the nightingale should make.

Sacred music is liable to similar criticism, and, being less under the guidance of men of finished musical education than the opera, it runs into noise and an excessive amount of harmony, which in the opera is always subordinate to the theme. "Harmony," says Rousseau, "regulates the tones, confirms their propriety, and renders the modulation more distinct: it adds force to the expression and grace to the air. But from melody alone proceeds that invincible power of pathetic accents over the soul. Let there be performed the most judicious selection of chords without the addition of melody, and you would be tired in less than ten minutes; while, on the contrary, a single voice with-

out the assistance of harmony will continue to please for a considerable time. Again, be it ever so simple, if there be anything of true pathos in the composition, it becomes immediately interesting; but, on the contrary, melody without expression will have no effect, and harmony alone will never touch the heart."

In conclusion, I would ask, what more interesting accomplishment can a young girl possess than that of performing in an agreeable manner any music for a single voice? The most eloquent talkers must give place to one who has this gift in perfection. The fame that awaits even a charming author is not attended with so much personal admiration. A fine ballad-singer who, with a tuneful voice, delivers her tones with the grace and simplicity of genius, if endowed with even moderate personal charms, enjoys a sort of deification. Beauty seems commonplace in the presence of her divinity. Wit cannot divert from her that attention, nor grace and loveliness that worship, which all hearts pay to her.

THE FOE IN THE HOUSEHOLD.

CHAPTER XXIV.

THE next day saw Delia Holcombe on the mountain road, going to visit Father Trost.

The road was shaded all the way by forest trees, — hemlocks, chestnuts, pines, and laurel; the air was laden with balm. But many times Delia felt herself compelled to sit down and rest. It was long since she had climbed this road. The trials which she had passed through had lessened her strength; she was surprised to find how weak she was. "It is because I am on this errand," she said; but that was not the only cause.

The way she had to go was familiar

to her. Every point that commanded a fine prospect she knew. Often had she paused to note the changes which had taken place in the valley since she could remember. Occupied for a while with memories of the old time, — with prophecies which the on-looking and far-seeing uttered in her youth, and the fulfilment these had found, and the agents employed in their fulfilling, — her mind was oppressed as she contrasted the eagerness with which she had then listened to the prophets, and the heaviness with which now she gazed on the results of labors that they saw begun. Lost, lost forever, were the enchantments of youth. Forever gone the delight there had been

in hoping. And what had she instead?

How many memories had this young Mr. Boyd revived! If Edna would behold her father, let her look at this youth and she would see what Edward Rolfe was when he first came to Swatara. To the contemplation of this young man's character she had turned with an interest which she had not supposed herself capable of taking in any human life. It was as if she had arraigned herself before a tribunal, and would judge her past by what she found in him,—so full of hope and enterprise, so capable and so happy.

She recalled the undisturbed self-possession with which Edna had proceeded with her work while young Mr. Boyd sat for his picture. How unconscious she had seemed! When Delia began to think in this vein, she forgot her fatigue, and did not sit down to rest again. She tried to imagine herself in Edna's stead, and she said: "The child is stronger than I was. She has in herself what I only saw in her father. She stands on higher ground than I did or do. O God! could I bear the look of her unsealed eyes?"

Mrs. Holcombe was going to see Father Trost. One of Delia's conspicuous offices was that of a peacemaker, and her husband had assigned to her this duty, suggesting that it might well be performed during the old man's disablement,—for his rheumatism still held him a prisoner.

The visit would come with double grace at a time when he might suppose she would be absorbed by her own affliction.

Emerging from the woods, she came to the uplands, and took the road bordered by the fine farms of Guildersleeve, Ahern, and Ent; among these was the little nook owned by Father Trost.

Two great black-walnut trees shadowed the house and the yard. Their enormous trunks and wide-spreading branches made the house look like a bird's-nest from the road,—a humble ground-bird's nest.

In the shady corner of his porch sat

the old man. Near by on a chair some needle-work was lying, which told that his watcher was not far away, though just now nowhere in sight.

Delia saw him sitting there, as she turned to secure the gate-latch. She walked up the straight and narrow path worn in the grass with a directness which told Father Trost who this visitor must be. A Mennonite, of course, by the dress of the woman; and no other than Delia could it be, for there was no female presence in Swatara like that of Friend Holcombe's wife.

"When my husband went away, Monday morning, he said he wished I would call and see how you were getting on; I have been trying to do so every day since,—but here it is Friday," said she, taking the chair to which he pointed, when he had shaken hands with her. "You have had a hard time, Father Trost."

"Yes," he answered; "and it's a bad matter at my time of life, with so much work on my hands, and when I was grudging the old body feeding-time and sleeping-time, to be bound hand and foot, as one might say. And the Lord needing me in his field here, all white for the harvest! Friend Hulcum could cut a long swath for me if he had the right kind of a scythe."

"But it is n't bad work that he's doing along the highways and hedges," said Delia, in a friendly tone.

"There's the right way of doing everything," he answered, doggedly. "If you want to put weeds down in your orchard you sow buckwheat, don't you? I tell *you*, Miss Dely, you've got to meet the Evil One fair and square, and no dodging, if you want him to understand there ain't room around for him and you. He ain't the person to treat softly and take off your hat to perlitely."

"But, Father Trost," said Delia, glad that the conversation had so soon taken this turn, and determined to show him the construction she had put upon his words, "you don't mean to say

that Mr. Holcombe has been in league with — with anything so unholy?"

"I'll tell you, Dely, what I think. I think he don't understand how the system works, for he won't step outside and take a look. I tell you, the system that don't work to the making of honest Christians, what'll you make of it? If it ain't in league with evil spirits, I don't know what is."

This was plain speaking.

"Father Trost," said Delia, meeting the gaze of his pitiless eyes with a look which was not designed to appeal to him, but which could not fail of making itself felt, — "Father Trost, do you know of any one besides Delia Rose it has n't made an honest Christian of? Is n't it Delia you have been preaching about all along?"

He neither discerned the spirit that looked from her eyes, nor heard that which spoke through her voice, and he was relentless. "It stands to reason," he said, "if *she* could play fast and loose, others could. She had in her bringing-up, as you might say, peculiar privileges; if you could expect anything except rottenness anywhere, you might there."

"Well," said Delia, "I know it. But I don't think you have judged right. I don't believe, sir, there's another one of our persuasion in Swatara but has a record you could read over with as little blame as you could read over your own church-people's records. I believe I am the only offender."

"Yes," he sneered; and then he spoke more kindly, for he felt his power, and that he did not need to wield it with all his might. "But look at Deacon Ent. Where would *he* be, do you think, if my girl had n't been honest?"

"Where would he be?"

"Married to a woman he could n't own before the people!"

"O then be thankful for that good girl, and be kind to her, Father Trost."

"I shall be kind to her," said he impatiently; "I can 'tend to my own business. But what I want you to no-

tice, Dely, is, it's *your system* that would have made Ent a deceiver, and it's my system that kept him from it."

"We shall never agree, except in one thing," said Delia.

"What's that?"

"That I did sin."

"And you don't mean to own it! Ain't that your order? Old Guildersleeve had to make a confession. How are you going to get your peace, ma'am?"

"I don't expect peace, Father Trost. It is something I have n't had for years. I don't look for it."

"If you believe Scriptur', ma'am, there's the story of Ananias and Sapphira you might profit by."

Delia considered these words, and looked at Father Trost astonished.

"Do you suppose Friend Holcombe knows what you and I know?" she asked with an indignation which for the moment mastered her.

"He don't, eh?"

"Can't you see, sir, have n't you seen, that this is the only reason why I did not long ago acknowledge all?" It was evident that he still doubted her; and that he should doubt urged her on to say: "But, sir, this is not the reason why I have not left the congregation. Friend Holcombe has made our religion dear to me. I love our covenant and our laws. I love all that you hate and persecute. I honor what you despise. I stand by our regulations. Put yourself where Bishop Holcombe is! Shall I bring contempt on the calling of that man of God? I implore you to say. I implore you, have pity."

The anguish which Trost saw in Delia as she spoke these words must have made itself perceptible to duller, coarser sense than his. But the thing that he could never do was to place himself, even in imagination, where Friend Holcombe was standing.

"If your husband has n't known this all along," said he, "I'm glad of it. I think the better of him."

"I knew—I knew you never could have wronged him as you have, and

grieved him as you have, and crippled him in his work so, but for me."

He saw her tears, and heard her groans.

"And if it had n't been for your doctrines," said he, steadying himself on this fact, for he had need to recall the system he hated in order to sustain himself when he saw her so moved, "you never could have been in this situation,—never! It's your system that's to blame, Miss Dely, and that's all I've said. And if the Lord spares me, it's that I'll fight agin till the end. I'll go on doing what I'm called to do,—enlightening, enlightening. Another set of young folks coming on, like your Edny there, won't have your excuse for sowing tares instead of wheat."

"I had no excuse," said Delia, humbly. "I had been taught. If I had been like your Mary, this would not have happened."

"System," he repeated. "I told you that afore, systems was made for men. If it's bad it works bad. How can it work any other way? It must be changed."

There was evidently nothing further to be said on that point.

After a brief silence Delia said: "Father Trost, I have meant for a long time to ask you for a certificate. You said that I should have one when it was wanted. As I told you before, your letter never came to us. Can you give me one to-day? Perhaps, if I should ever see that the truth must be told, as I do not see now, it would be necessary for me to have it; at least, I wish for it."

The old man's eyes sparkled. That was an hour of triumph for system. "Look at these hands here," said he. "I have n't held a pen for weeks. I could n't make my mark even. I'll testify for you before witnesses though, any day, Miss Dely; but remember, I can't come out of my grave to do it. What thou doest do quickly. Look ye, Dely Hulcum! What if the Lord has a stiffened them cords, and made me a cripple for your sake! I say, Yea, Lord, pluck 'em! pluck 'em as brands

from the burning by me; I can bear it for the gospel's sake."

Delia arose. "I forgive you," she said,— "I forgive you for laying off your cruelty on to the Lord like that! I can bear my burden. I may come to you some day and ask you to testify before witnesses. The Lord may kindly show me how I may do it for his honor and glory. Till then I can bear my burden. But you! find, if you can, how to answer why you have made use of a poor girl's foolishness and sin to fight a church and a true servant of God. It is a woman you have been seeking to terrify, and not the Devil that you have been fighting. I remind you of the promise you made two foolish young creatures, that you would consider the ceremony you had performed for them their business and not yours! Perhaps you will say you have not broken your promise. How much better have you done, throwing dishonorable charges on a people, which you knew you could not explain! I say, sir, it is a pity that your system has not made an honest Christian man of you."

The old man did not answer. And Delia did not wait for an answer. She was afraid to trust herself within his hearing longer. There was nothing to be gained by either of them from further talk. He had shown himself malicious in the satisfaction he evinced that he could not give her the certificate when she asked for it.

By and by Mary came and sat down in the porch beside her grandfather and resumed her work, glad that he slept, for then surely he had not found the time long that she had stayed away.

After a while he roused himself and said he would go back to his room. He felt it chilly in the porch. So Mary helped him into the house, and did not guess that a whirlwind had passed by, that bright summer afternoon.

The Boyds were driving along the road from their house to the mines, when Mrs. Holcombe was seen emerging from the pine grove.

"There's the bishop's wife, a good way from home," said Max, remembering that once before he had found her in that region, and that she had not then refused his offer to ride home in his wagon.

Christopher turned and bowed, as Maxwell spoke. A tired and sad face was what he could not bear to see in a woman. He reined in his horses and told her that they were going her way, and would she ride? Max sprang from the wagon before she could answer; and as Delia was in fact very weary, she expressed her thankfulness and allowed him to assist her in getting up into the back seat.

When they had driven as far as the superintendent's office, Mr. Boyd said he must speak to Mr. Elsdon, and asked Max to drive down with Mrs. Holcombe, and stop for him on his way back.

As he turned towards the office, John Edgar came out. A long conference between himself and Mr. Elsdon had just ended, and John looked rather excited. But his excitement did not prevent his seeing that Mrs. Holcombe was in Mr. Boyd's carriage, and that Mr. Boyd had just alighted, and that Mr. Max still held the reins. But as his back was turned upon the party almost before they noticed him, he walked away, at a faster pace than was necessary, since nobody thought of following him, and his work as an artisan was about finished for this world.

Max drove slowly down the road. He derived an almost perfect satisfaction from the simple fact that Mrs. Holcombe was with him in Christopher's carriage. When in their conversation he looked around at her once or twice, he thought how fine a face it was, and that its good looks were not to be damaged in the least by the ugly poke bonnet she wore. How grand and how lovely she seemed to him! He felt that he loved her; and he did with all the enthusiasm and reverence a good and pure young spirit may entertain towards a gracious, kindly woman,—he loved her more tenderly than he loved Christopher, and as warmly.

"Is n't there something I can do for you?" he asked as he helped her from the wagon.

"Let us see you at our house as often as you can make it agreeable to come," she said. "You know how glad we always are to have you come."

"But you must let me know when you have another long walk to take," said he; "I can always have one of the horses, and it is such a pleasure to drive over this beautiful country. You would confer a great boon on me by letting me take you."

"Thank you, I will remember it," said Delia; and she had so far lost sight of the miserable business which had taken her to Father Trost, that as she walked towards her house she prayed for the preservation of the beautiful youth of Maxwell Boyd.

CHAPTER XXV.

JOHN EDGAR had held an important consultation with Mr. Elsdon that afternoon. He had been exhibiting the results of his recent investigations in the neighborhood of Pit Hole. In compliance with the superintendent's request he had begun to explore. It was seldom that he felt at liberty to leave the workshop by daylight during working-hours, for the post he filled was an important one, and his services might be required at any moment; but all the time he could command he had expended in investigations and experiments. The result he had been communicating to Mr. Elsdon this afternoon was not of experiment, but of observation,—he had been exploring with expectation of discovery.

The moment he entered, Mr. Elsdon arose and locked the door.

"I hope you can talk as well, John, if you know we are alone," said he. "It makes me nervous, when I have business in hand, to be interrupted every moment."

John was quite satisfied that there should seem to be a necessity of talking behind bolts with the superintendent. "I may be mistaken, sir," he said, pro-

ceeding to business with a promptness that Mr. Elsdén liked; "but I think the drill has more than paid for itself, for it has set me on to use my eyes as I never did before I had it. Can you tell what this is, sir?"

Mr. Elsdén glanced from the fragment which John had placed before him to John's face; they both smiled and looked well pleased.

"I know iron ore when I see it, John," said he.

"There is plenty of it, then, sir. Is it worth as much as coal?"

"Pretty nearly!"

"Then you are the proprietor of an iron mine, sir."

"Then John Edgar is my partner!" Mr. Elsdén laid his hand on John's shoulder at that, with a friendliness that was very evident, and a familiarity which sent a thrill through the young man's frame.

"But we don't owe it to the drill," said he, "I have broken that. I can't work it without a stronger engine to drive. But I know I am on the right track. After that was done for I set to work with my eyes, and this is what I found."

"And a very good finding; an admirable finding, I call it. The iron has lain in that mine, —how many thousand years do you think?"

"Since the flood, for all I know."

"Quite as long; it can afford to lie there a little longer then, we have n't time to attend to it just now."

"Wouldn't Mr. Boyd take hold of it?" asked John, somewhat timidly. There was something about this business which was not quite clear to him, and it troubled him a little.

"I should like to know why he should take hold of it," said Mr. Elsdén, apparently surprised, and not very well pleased by the question. "He has nothing to do with it. I purchased the mine before Boyd came here; and as I said before, you and I are the partners in this business."

"Then you expect something of that drill yet," said John, elated.

"I expect something of you."

"Then you will tell me, sir, what you expect, so that I may do it!"

"Good! But no haste."

"I should n't think, sir, that you would wait a day."

"I must. That is a hard word to get round. And there it is. When you are as old as I am, John, you won't have enthusiasm to trouble you, and tempt and blind you. I hope you will still have warmth enough in your blood, though, to enjoy a genuine success. And that reminds me, how are you getting on, my lad, in the other direction? I mean about Miss Edna?"

Somehow, it seemed to John that this question did not comport well with his notions of what became Mr. Elsdén's dignity; still it showed an interest in himself which was certainly flattering.

"Not very fast. But I mentioned it," said he.

"That is fast enough. For you do not suppose the young lady will forget it again."

"I almost wish she would; for it troubled her."

"Of course it would trouble her. But everything comes by trouble. It is your situation, — I cannot believe it is your character, — that makes you vacillate. When you have secured the young lady's rights to her, you will have won your spurs as a gallant knight, and nobody will dispute your right to the society of gentlemen." ("Nor mine to go on mining when you get the money for it," he added to himself.)

"Excuse me," he said, when he saw how confused and excited he had made Edgar by his last words; "when I talk with a friend, I am likely to say out all I have been thinking about him, and somehow you have managed to occupy my thoughts pretty steadily along back. But, John, you are a shrewd fellow; just tell me how long you think this business of Boyd's is likely to hold on."

Edgar was too much surprised by what was intimated in Mr. Elsdén's manner as he spoke, and by the words

he uttered, to feel amazement that they should have been addressed by that gentleman to himself. Approaching the desk, he looked at the superintendent. "Why, sir, as long as Mr. Boyd pleases."

"In my opinion, it must be his pleasure to wind it up very speedily then. I have been looking over things: we're falling off in the quality of coal. It don't bring the price it did. The best is down, for the market is glutted. Every day or two we hear of a new failure, and everybody distrusts everybody. That iron won't rust. It is safer locked up as it is than it would be elsewhere. If I stood where you do, I would n't change my place, sir, for Christopher Boyd's."

"Does he know what you think, sir?" asked John, looking away from Mr. Elsdén and conscious that his own face had crimsoned during the last few seconds.

"He knows what he thinks himself,—that we're on the breakers. He believes that he can steer clear of the rocks. He may. He says that he has known worse times; but I never have."

John seemed to shrink bodily before the prospect which now began to come out clear before him. "It's too bad," said he; "I don't like it."

"It's ugly."

"Can't you make Mr. Boyd see it as you do, Mr. Elsdén?"

"You need n't waste your sympathy on him, John. He could n't be made to see any different by anybody. He won't have a fall either. He will land on his feet, and climb up higher than he was before, I have n't a doubt. If there was n't all that in him, I should exceedingly dislike to occupy my present position. By the way, I expect him along this afternoon; we sent down to Emerald for news, and I have despatches," and he placed his hand on a pile of letters lying on his desk. "Is n't he coming now? Yes! there they are. Bear in mind what I have said to you, John. The Holcombes have as much interest as anybody in the success of the mining interests here."

"Can he mean," thought John, as he

walked away,—“can he mean that Edna's fortune is locked up hereabouts? It could n't be that was why he was so ready to say I should be his partner?”

CHAPTER XXVI.

FAULKNER had said that he would come down next day to have the papers made out, and he kept his word. The doctor expected him, and the two went together over to Swatara,—Faulkner with the doctor's receipt in his pocket, and Detwiler carrying in his note-book the farmer's draft on Boyd's bank for six hundred and ninety-five dollars.

There was a promise of rain, and when they came to the ford, Faulkner concluded to go on homeward without stopping at Mr. Holcombe's; the doctor accordingly went over alone.

Arrived at the house, he found only Edna. She was occupied with some household work, but, when she saw him, stopped everything, and ran towards him in a way that showed he had come to a place where there was need of him.

So satisfied of this was he, that he gave no evidence of his perception, but greeted her with his usual cordial, cheerful "Good morning. All well?" and sat down as if he had the day before him to spend as he pleased.

"Is Mistress Holcombe within?" he said; and Edna answered, as she went on with her work, "Mother has gone to see somebody that was hurt in the mines yesterday."

The doctor noticed that word "mother,"—he had never heard Edna use it before.

"Not a very serious hurt though," he said, "but our mother takes everybody's pain and sorrow to heart. If the world were rich in such mothers, Edna, we should have a race of angels on earth."

As she did not respond at once, he asked her if she did not agree with him; and then he perceived that she was trying to answer, and to conceal her emotion; in spite of her effort, though, he saw bright tears dropping from her

eyes. Suddenly it occurred to Edna that by taking the doctor into her confidence she might rid herself of the burden John had put upon her when he counselled her to interrogate Mrs. Holcombe in regard to her past; and so she began:—

"I want to ask you something, doctor."

"Come then and sit down here by me," he said. "I am growing old and hard of hearing, you know."

But she continued her work instead, for she was so agitated that she knew if she dropped it and sat quietly down the only thing she could do then would be to give way to the floods of tears which threatened every moment to find their outlet.

"I want to ask you," she said, "about—my people."

"Well, then, you must ask," said he; and he wondered if Delia's hour had come.

But after Edna had gone so far she hesitated. It seemed to her that to question the doctor was to exhibit as great a distrust as when she questioned Mrs. Holcombe; but then she thought of John, and of the satisfaction it would be to be able to say to him that he was mistaken; and after she had distinctly asked the doctor she intended to show him that her question had no meaning. And so she said:—

"Do you know anything about them? Have I any rights which I have never heard of?"

"Are you sure that you are wide-awake?" returned the doctor. "Come here and let me feel your pulse. Who has been telling you fairy tales, that you think Mr. Holcombe has a Cinderella in the house who is going to ride off in a coach some fine morning to her house of gold?"

Edna did not look confused, but glad, to hear this. "You may make all the fun of me you please," she said. "I like to have you; for it would be dreadful to think they could—could do what was n't right."

"I should think so," said the doctor; "I should think so," he repeated

slowly. "And now tell me who has dared to give you a cup of poison, and slander the best people that live."

"I only wanted to know what you would say," she answered. "You never went down to Hollandsburgh!"

"A hundred times, at least."

"O, then, did you ever see my father there?"

"I have seen him often."

"Then—then you can tell me all about it, and him, and everything."

"In the first place, I ought to tell you," said the doctor,—not to gain time, for he had at once decided on the course he would take, but to divert Edna's attention and lessen the excitement with which she prepared to listen to him,— "Faulkner has been down according to agreement, and I had the papers all ready for him. He has given me his note, and you can get the money from the bank any day, or I can get it for you. There it is," he said, producing the note; "you can see his name is good for something written down there: it makes you the owner of a nice little sum of money."

"Yes, thank you."

"Well, but take it, it is yours. You see I have indorsed it here."

Money had come to Edna, as it comes to many others, at a moment when its value was sadly depreciated. What she wanted now was to hear about her father.

And the doctor did not keep her waiting long. He satisfied her heart. He gave to her a portraiture which she must evermore behold, and love, and honor. It was impossible after he had spoken that she should ever lose that image, or that she should ask again if he had left her at his death poor as well as orphaned. The doctor had noble material, and he used it nobly. The father of Edna was a gentleman, educated and refined; and but for his early death he would have redeemed every expectation formed of him by those who knew and loved him. He, too, had skill in drawing, and, had he studied art, might have been in the foremost rank of artists. The doctor said it had

rejoiced him when he saw her taking up her pencils and using them so skillfully: that was a part of her inheritance, and but a part of it. Did she know what he was going to propose to Mrs. Holcombe? It was that she should be sent away to school, to a town where his sister lived. His sister had daughters, and he had not a doubt that he could prepare a home for Edna with them; if not that exactly, they would at least be her friends and companions. She had not failed to notice that he had been in earnest when he called her attention to this and that book which he brought her to study. It was because she was beloved for her father's sake; because he knew what her father would have wished to do for his child, had his life been spared.

In all his talk the doctor did not once allude to John Edgar. He seemed to have forgotten him. He had not forgotten him, but he wished her to see how little such a person had really to do with her life. He wished her own mind to suggest to her the contrast between him and this personage whom he had given to her imagination with the liberty and the right to call him father.

She sat listening to him, her eyes upon him, growing more and more serene till they were filled with the most lovely light. At last, when he had quite finished speaking, she seemed to feel the blissful spell removed, and, with a start, exclaimed, "O, why did n't you tell me all this before?"

"Because the time had not come. I knew you would ask me some day, and I waited for that. And I will tell you one thing more, Edna; he always wished that you should come to live with Mrs. Holcombe. Of course, that could not be managed very easily while Annie lived, but after that no time was to be lost by those who cared for his wishes. You will bear Mrs. Holcombe witness: was she willing to receive you? It was for your father's sake that she was willing."

"I know," she said, sadly, "it could not have been for mine."

"But has she ever made you feel for one moment that you were a burden?"

Edna's answer was a blushing, confused face.

"Then, let me tell you, all your endeavor to earn money, that you might pay your way here, was an insult to Mrs. Holcombe."

"I see it," said Edna. "I have always been insulting her. I have never understood her. But I know now that she loves me, and it makes me so unhappy. I wish I had never come here. I wish—"

"See!" said the doctor, interrupting her before she should be mastered quite by her excitement, "it is the best thing that could have happened that you came here. Think of this lonely house without Rosa, and no dear one to love! And even if they did not love you, think of their being left without your love!—you are as another child to them. No! no! you are your father's daughter; he would have seen as I do that it was the best thing that could have happened that you came here."

"Take this, I don't want it. I don't know what to do with it," said Edna, giving Faulkner's note back to the doctor. "I did want it to pay them. But it would give them pain. I have the money for those drawings too. Would it be an insult to ask them to let me help buy the gravestone for Rosa?"

"I think not. You might speak about it to Mrs. Holcombe. But no more talk, Edna, as if you belonged anywhere else than here, or to anybody else than these best people. And I think I will just leave you to manage Faulkner's note yourself. Your heart will show you what to do with it, I am sure. If Mrs. Holcombe were your own mother, you would ask her advice about it, if you had come into the possession of property in your own right. Well, do the same thing now."

He talked himself into his best mood finally, and Edna could not listen to him, and look at him, without feeling that his buoyancy of spirit had communicated itself to her.

When Mrs. Holcombe came home, Edna found it easy to tell about the doctor's visit, and to say that he had completed the sale of the little estate, as old Annie's executor, and to give the note to her and say: "It is nothing to me, mother, for everything I have is yours, you know."

The act, and the name by which Edna had called her, made Delia's heart stand still. It was obvious that a great change had taken place in this girl since the days when she called Delia Mrs. Holcombe, and held herself apart as a stranger, or at least as an alien, under Mrs. Holcombe's roof. It was no longer as the recipient of bounties, but as the loving child that she spoke!

"We must talk with father about this," she said, holding the note loosely in her hand, uncertain for an instant what to do with it; then she arose and laid it in the Bible on the bureau. "He will be safe counsel," she said.

"Yes," Edna assented; and then she feigned great interest in the wounded man whom Delia had visited, and so gradually she made her way beyond the circle of her morning agitations.

When she saw John again, she had thought of a device by which his well-being might be secured, and at the same time her own. Her heart, disturbed and perplexed, turned, as in all ages the disturbed and the perplexed have turned, to the church, seeking rest and security within its walls. She wished heartily, moreover, to give Delia Holcombe a joy.

She was not born and had not been bred a Mennonite; she had not been baptized, and therefore had no membership, though of course she wore the dress and conformed to the customs of the people among whom she dwelt.

She felt that it was time she thought of baptism and of membership on her own account, and on John's account she considered the restraints made necessary by Christian obligations would prove as beneficial to him as to herself. She resolved to speak with him.

Last year, in one of her wayward

moods, she had declared to Rosa her conviction that she should never be able to consent to unite with the Christian body over which Mr. Holcombe presided. Delia had overheard the argument, and had afterwards sought opportunity to say to Edna that she never must unite with them unless she should heartily desire to do so. And now she did heartily wish to be recognized as of that Israel. If she was to be John Edgar's helper, it was necessary that she should herself abide in the fastnesses of the rock.

When she told John her wish, he would have laughed outright had it not been Edna that spoke. All his thoughts in these days were sweeping down towards the great busy world. He was coveting that world's honors and successes; he was preparing for the arrival of Good Fortune, who should remedy every ill; he smiled at Edna's simplicity, and told her that this was really the last thing he had expected to hear from her, and that a little further on she would change her mind about it.

But she answered that she should not change her mind, for the reason that in the church all was safe and quiet.

Then he reminded her that if she, who was good enough already without the church, should join it, he would be obliged to follow her, and he had no wish to do so; but that he should do so, and only on her account, and thus he would be a hypocrite. But he added: "I am fit for the church though, Edna, if I am fit for you. But we shall not be living here very long, and outside of the woods we shall associate with a very different class of folks. We shall go into the world among gay people. My business will carry me about a great deal."

She just here recalled the doctor's words,—his counsel about the school; and the vision of her father seemed to stand before her, gazing upon her and upon John. "Wherever we go," she said, "we shall want to be quiet in our hearts."

That rather serious answer he turned off with a laugh. "You are the last one that will be asking for the quiet you get here, in a few years," said he. "Why, you will hardly know yourself, or me either, five years from now, Edna. We are children to what we shall be."

Edith recognized the truth in this prophecy. "What is it you are thinking of all the time?" she asked. "What fortune do you see before us, John?"

"I see wealth, reputation for me," he answered. "For you I see more than it would be safe to let you know."

His words had a pleasant sound. It was clear to Edna that John was satisfied with her. And in spite of what the doctor had said, in spite of the parentage which seemed to ally her to nobles, there was in this poor, struggling John Edgar, who had not only fortune to fight against, but himself also, that which was the best of romances to her. She *could* not see anything really base, actually dishonorable, truly vile in him. She saw him, in fact, quite clearly,—the bad and the good,—and knew that he loved her. So pleasant a sound had his words that she dwelt on them in her thoughts, and merely smiled in answer.

They were walking in the neighborhood of Pit Hole again, and he said: "You see that mountain. My fortune lies in there,—a part of it. But you can't guess what I mean by that, and I am not at liberty to tell you yet. Have you found out though, what I meant by that other riddle? You must not attempt to discover this one, but the other I gave you leave to guess."

"There's nothing to find out, John."

"You think so, or somebody told you so. Now which?"

"We will just drop that subject. I like better to have nothing than —"

"Yes, than just to speak out and say you want what belongs to you! That is n't a man's way of doing business. Well, never mind," he added, for he was conscious that he had spoken rudely, and there was a mixture of pain and indignation and disgust upon Edna's face which he liked not to see there. "You won't hinder my making a fortune for both of us," he continued. "I am not to be put down. Why, look at the Boyds! they began life as low down as any of these miners,"—he did not say *as I did*,—"and you see there's nothing to hinder a man's climbing to the top round of the ladder. I was going to ask you, Edna, if you would let me have another of those books. I can't tell you how much I have got from them. They feed me"; and then he began to quote in a softening voice, till Edna heard only music in it, as in the thoughts he uttered,—

"You are my all-the-world, and I must strive
To know my shames and praises from your tongue;
None else to me, nor I to none alive,
That my steeled sense or changes, right or wrong.
In so profound abyss I throw all care
Of others' voices, that my adder's sense
To critic and to flatterer stopped are.

You are so strongly in my purpose bred
That all the world beside, methinks, are dead."

Sweet words they were, to hear thus spoken! What wonder that Edna, remembering, should exact of herself fidelity, and find it easy to shape her words into praises of the life which she had come to perceive more and more clearly she must guard!

GARIBALDI.

IN trance and dream of old, God's prophet saw
 The casting down of thrones. Thou, watching lone
 The hot Sardinian coast-line, hazy-hilled,
 Where, fringing round Caprera's rocky zone
 With foam, the slow waves gather and withdraw,
 Behold'st the vision of the seer fulfilled,
 And hear'st the sea-winds burdened with a sound
 Of falling chains, as, one by one, unbound,
 The nations lift their right hands up and swear
 Their oath of freedom. From the chalk-white wall
 Of England, from the black Carpathian range,
 Along the Danube and the Theiss, through all
 The passes of the Spanish Pyrenees,
 And from the Seine's thronged banks, a murmur strange
 And glad floats to thee o'er thy summer seas
 On the salt wind that stirs thy whitening hair,—
 The song of freedom's bloodless victories!

Rejoice, O Garibaldi! Though thy sword
 Failed at Rome's gates, and blood seemed vainly poured
 Where, in Christ's name, the crownéd infidel
 Of France wrought murder with the arms of hell
 On that sad mountain slope whose ghostly dead,
 Unmindful of the gray exorcist's ban,
 Walk, unappeased, the chambered Vatican,
 And draw the curtains of Napoleon's bed!
 God's providence is not blind, but, full of eyes,
 It searches all the refuges of lies;
 And in His time and way, the accursed things
 Before whose evil feet thy battle-gage
 Has clashed defiance from hot youth to age
 Shall perish. All men shall be priests and kings,—
 One royal brotherhood, one church made free
 By love, which is the law of liberty!

HUNTING IN THE BRITISH ISLANDS.

IN making use of the word "hunting," which, with its variations, will often occur in this paper, I do so in the restricted sense in which it is understood in England. Here, the word is applied to the pursuit of all kinds of wild animals, with all manner of weapons and appliances, and with or without the assistance of dogs. In England, when people speak of hunting, they mean the chase of certain animals—chiefly the fox and the hare—with hounds that hunt by the scent, and that are usually followed by sportsmen on horseback.

By reference to the hunting appointments in Bell's Life in London, it will be seen that England has one hundred and twenty packs of hounds, Ireland forty, and Scotland six, making a total of one hundred and sixty-six. These figures, however, do not represent the actual number. There are in the "three kingdoms" many minor packs of hounds kept by private individuals, or by subscription, and these are not of sufficient importance to be included in the announcement column of Bell's Life. Counting these in, it would be safe to say that about two hundred and fifty packs of hounds for the pursuit of the deer, fox, hare, and otter are now maintained in Great Britain and Ireland.

Of the regular packs kept by subscription, by far the greater proportion is devoted to the chase of the fox, that being the animal by which the best sport is afforded across country. Indeed, there appears to be a notion of chivalry connected with fox-hunting; the fox is looked upon as "vermin," and to extirpate him by riding him down with hounds is the only means of insuring the barn-yards against his ravages. And yet this is but the shadow of an idea, for the extirpation of the fox is very carefully guarded against. In all the fox-hunting districts of Great Britain the man who would kill a fox with gun or trap subjects himself to social ostracism. The sporting gentry of the county give him the cold shoulder, and even the farmers regard him with disfavor. For there is a strong traditional love of hunting among the farmers, who are often keen fox-hunters themselves, enjoying full liberty to "follow the hounds"; and any damage to their fields and fences by the horsemen, or to their hen-roosts by the foxes, is made good to them from a fund subscribed for that purpose. Therefore the fox is, in most districts, tolerated, nay, encouraged, as a sort of amusing rascal, whose grand redeeming point is that he furnishes the motive for the great national sport.

The favor with which that sport has

long been viewed in Great Britain is evident from the vast sums of money that are annually expended in maintaining it. One of the great county distinctions is, to be a "Master of Fox-Hounds," and subjoin the cabalistic letters M. F. H. to one's signature. Fox-hunting has a literature of its own, too. Somerville's "Chase" is a standard English classic, — a poem full of charming, pastoral pictures of rural English life and character. Peter Beckford, an ancestor, I believe, of the eccentric author of "Vathek," wrote a book on hunting, in which is to be discerned that combination of scholarship and physical energy so characteristic of English gentlemen who follow field-sports. But the volumes that have been written on the "noble art," as the votaries of fox-hunting fondly style their dashing sport, are innumerable. The ephemeral literature of hunting and field-sports generally, of the present period, may be styled the "Nimrod," that being the *nom de plume* under which Apperley wrote so voluminously on these subjects thirty or forty years since. From him nearly all the writers in the English sporting papers of the present day have taken their color, and most of the writers of books treating of hounds and horses; and, as Apperley was the best of them all, it is fair that this branch of writing should be known as "Nimrod literature."

And the pencil, no less than the pen, has found employment in depicting the stirring scenes of the hunting-field. Not to go back to the numerous painters by whom the sport has been illustrated in times long past, let me instance Sir Francis Grant, a painter of rank and fashion, and now President of the Royal Academy. The first essays with the pencil that brought Grant into notice as an artist were pictures and sketches of hunting scenes. In these he was particularly happy, being an ardent sportsman himself, and one who, it is said, spent an inherited fortune on sport. The fine picture by the artist of the "Meet of her Majesty's Buck-Hounds on Ascot Heath" is well

known in this country, through the large engraving from it. Fifty years ago the most popular delineator of accidents and incidents of the hunting-field was Henry Alken, whose quaint, stiff plates in aquatint or some such manner are still often to be seen in old English ale-houses, and not unfrequently in similar resorts in New York. These, absurd as they are in their hard, literal renderings, are valuable now, as being really faithful transcripts of what hunting-men and horses and hounds looked like half a century ago. Best of all illustrators of the hunting-field of the present period was John Leech, whose numerous scenes of sporting life and character were one of the most attractive features of *Punch* for so many years. No artist but Leech ever thoroughly drew an English hunter: by which I mean the horse used for hunting, that being the only way in which the word "hunter" is applied by English sportsmen. He also knew how to put a rider properly in his saddle, whether he meant him to represent a good rider or a bad one; a point in which none of the other delineators of horses and their riders have ever come near him. In the whole extensive range of Leech's presentments of social life and character, there is no phase, perhaps, that so marks his wonderful power of observation and ability for rendering action, as his scenes in the hunting-field.

Englishmen carry the sport of fox-hunting with them wherever they go. The Duke of Wellington maintained a pack of hounds when he commanded in the Peninsula, and no leader more than he ever fostered among his officers a taste for the sport. It was "a good way to make soldiers," said the Iron Duke. At Gibraltar, in Australia, and in Canada, fox-hunting is kept up as far as practicable. In India the jackal is made to do duty for the fox, and in Australia the kangaroo; but it is in the British Islands only that the sport is carried to anything like artistic perfection.

Within the present century, the style

and accessories of fox-hunting have been greatly modified. Towards the end of the last century the horses and hounds were of a much heavier and slower type than they have been since. The sportsmen were attired much in the fashion of garments in which George Washington is generally represented. Excessively tight buckskin breeches were among the affectations of the sporting dandy of those days. I have been told by veteran fox-hunters how, in their youth, they used to put on their leather breeches before retiring for the night. In those good old times the field was taken at early dawn, and the tedious operation of pounding himself into the tights would have hazarded the wearer's punctuality at the cover-side. Some years ago I met on the Long Island shore an aged fisherman, who told me that, when a youth, he served in an organization called the "Buckskin Guard," I think, and that they used to sleep in their breeches lest they might be late for morning parade through trouble in getting them on. Scarlet—or, as it is generally termed in sporting slang, "pink"—has been long the recognized color for the fox-hunter's costume. Some hunts wear green, and there is one hunt in England the uniform of which is orange-tawny plush. The old style of hunting-cap, made of strong leather covered with velvet, to protect the head in case of a fall, is now seldom worn by gentlemen. It is still, however, as it has long been, the proper head-gear of the huntsman, or official who manages the hounds, and of his attendant aid, who is styled a "whipper-in,"—a term commonly abbreviated to "whip." Of these, in the more important hunting-establishments, there are usually two, called the first and second whip, respectively. The modern style for a hunting gentleman is a scarlet coat, cut in the fashion of a dress-coat, corduroy or buckskin breeches, and very natty boots with buff-leather tops, which reach to within about four inches of the knees. The ordinary hat, vulgarly known as a "stove-pipe," is more frequently worn now than any other.

Until within forty years, the class of hunter used in England was very different from the one at present ridden to hounds. The sketches of Alken will convey a better idea of the old-fashioned hunter than any others of which I know. He was a short, compact horse, very thick in the crest, and round in the hind-quarters, which were jauntily set off with a short, elevated tail. Horses' tails used to be nicked underneath, and held up with pulleys, until they grew to the desired "cock," or angle of elevation. It was also the fashion in those days to crop the ears of horses off very close, and I myself remember to have seen veteran hunters whose heads had been thus maltreated. There was no necessity for fast horses in the field then, for the hounds were comparatively slow, and did not require something with racing blood in it, to "live" with them, as the hunting expression has it. In progress of time faster ideas took possession of people. That is the way the world goes. Once upon a time we were contented with stage-coaches and five miles an hour; now it is nothing but rail and forty. The fox-hounds, after a while, came to be more finely bred, until they became too swift for the steady old horse. This led to the introduction of racing blood into the hunter stock, until the English hunter became the bony, fine-drawn, lean-necked thoroughbred so truthfully presented by Leech in his hunting sketches. Owing to the increased speed, there is less "music" in the fox-hunt now than there was formerly; and, for the same reason, hunting is more like steeple-chasing than it used to be, and none the better for that, perhaps.

A kennel of hounds is a very interesting sight. Some of the great English kennels are quite extensive establishments, covering, with their appendages, large spaces of ground. A kennel consists of a yard enclosed by high walls, and with buildings attached to it. If convenient, a stream of clear water should pass through the enclosure, which also ought to have grass-plots for the hounds to roll upon, and trees

for shade. Opening into the yard are the sheds or dormitories in which the hounds sleep. These are fitted up with long shelves of plank raised about a foot above the floor, and covered with clean straw, for the accommodation of the hounds. The kennels open, on the other side, into the feeding-yard. The principal food of hounds is a mess of oatmeal and potatoes, with which buttermilk is sometimes mixed. Instead of buttermilk, however, on certain days of the week, their food is enriched with "greaves." This is a refuse from the tallow-candle factories, and is a brown, coarse-looking material made up in large cakes, which, when heated, melts down into a sort of pungent gravy, of which hounds are very fond. Boiled horse-flesh is another standard article of food in the kennels, and is given to the hounds on stated days. The day before hunting, such hounds as are detailed for duty get nothing but oatmeal porridge and buttermilk, so as to keep them sharp-set for their work.

In some kennels the education of the hounds, and the state of discipline to which they have been brought by their keepers, are very amusingly exemplified at feeding-time. Two or three large troughs, filled with whatever the food allotted for the day may be, are ranged in the feeding-yard. All this time the baying of the hounds from the kennel bespeaks their impatience for the meal. At last, all arrangements having been completed, the doors leading to the kennel are thrown open, and out rushes the pack, pellmell. A few cracks from the whips of the huntsman and his assistants make them huddle all together at a little distance from the troughs. Then the huntsman, having made a careful survey of the pack, selects those hounds that are poorest in condition, and calls them out, one by one, by name, cheering them to the troughs. It is very interesting to see how perfectly the hounds understand this arrangement, and how well they know their names. But the most amusing part of the scene is when the huntsman raises his horn, the blast of which is

the signal for all the hounds to rush forward and take their places at the troughs. The eager eyes with which they watch every movement of the huntsman's hand, as he slowly dallies with the horn; the tiptoe straining; the stretching of sinewy necks and standing up on hind-legs,—all these are very characteristic, and curious to see. At last the shrill blast is blown, and in a moment the troughs are completely concealed from view by the spotted bodies of the hounds.

In the field the discipline of hounds is equally remarkable. Fox-hounds will naturally hunt hares; but, as hares are much more plenty than foxes, and would therefore interfere with the legitimate sport if noticed by the hounds, the latter are strictly educated to ignore them. This is remarkably illustrated in "drawing cover," or, in other words, beating through a thicket for a fox. Hares will start up on every side, before the very noses of the hounds, who take no more notice of them than they would of toy-kittens. Should a young hound chance to forget himself, though, and make a dash at a hare, a sharp cut from the thong of one of the whips immediately brings him to a sense of his delinquency.

The cover-side, at a "meet," is a very picturesque and varied scene. A field, or lane, hard by the copse that is first to be drawn for a fox, is usually the rendezvous. By ten in the morning a number of sportsmen, members of the hunt, visitors at the neighboring country-houses, sporting swells from a distance, and farmers, have assembled at the cover-side. Many smart-looking grooms are to be seen there in charge of their masters' hunters. The owners of these may have come down by rail, or they may have driven down in their sporting "drags," or ridden upon their "backs,"—the latter term being used in England to denote a smart roadster much used by gentlemen for general purposes. Nobody ever rides his hunter to the cover-side unless he happens to live within an easy distance of it. Men who own large stables have usu-

ally two hunters brought for them to the place of meeting. One of them is termed the "second horse," and the business of the light groom who rides him is to keep as near as he can to the hunt during the run, by making short cuts, trotting along roads, or in any other way, according to his judgment. Then, when the hounds have come to a check after a long burst over the country, he makes his way to his master, with the fresh horse. Leech made a capital sketch of one of these "second-horse men," who is coolly clearing a five-barred gate in taking a short cut on a noble thoroughbred hunter. Men in scarlet now come dropping in by twos and threes. Some of them are "heavy swells," whose tremendous whiskers trail after them in the breeze. There are military men here, too; but these, although daring riders across country, are not often the best. Here and there may be seen a portly squire, sometimes well advanced in years,—a well-mounted and well-appointed gentleman with rosy face and silvery hair, whom everybody seems to know. Ladies, with their attendant cavaliers, are frequently to be seen in the throng; for it has become the fashion, of late years, for ladies to join the chase. Few of them, of course, ever see more than the "throw-off," or beginning of it, but there are exceptions; and it is not uncommon now to find fashionable young Amazons who ride across country with great pluck and skill. Sometimes there is a sporting parson on the ground. He wears a black coat, of course, but it is not always of a strictly clerical cut, and the rest of his equipments are of the regular sporting sort, though somewhat subdued. He is generally mounted upon a useful horse, that combines the roadster with the hunter, and it sometimes happens that the parson leaves many of the red-coats far behind him in the run.

In a clear space near the cover the hounds are drawn up, carefully watched over by the huntsman and whips. They lie lazily about, licking each other's ears or their own paws. Some of them tumble on the grass, and others lift

up their muzzles, and give utterance to the peculiar bell-like cry that distinguishes the fox-hound. Near the pack sits a gentleman upon a first-class hunter. Everybody, almost, seems to know him, and many of the comers exchange greetings with him as they pass. That is the master of the hounds. He is a man of standing in his county, often a nobleman, or a baronet, or a squire of landed estates. Several men of the farming class are generally to be seen on these occasions. They are, for the most part, men who breed horses of a high class for sale, and know right well how to show them off to advantage in the hunting-field. Most of them dress in a knowing and sportsmanlike style, but they never wear scarlet. There appears to be a social understanding about this, and the farmer who would turn out in pink would be set down even by his own class as "putting on airs." A black-muzzled gypsy on a donkey is a very usual feature of a meet, and there are always many stragglers on foot,—earth-stoppers in tarnished velvet coats, with sharp-looking little terriers under their arms; gaping country louts in smock-frocks; idlers who pick up a living by holding gentlemen's horses, catching runaways, and performing such other small services as are sometimes useful and timely to sportsmen who have "come to grief."

It may be seen that the cover-side is no bad place for variety of character and picturesque grouping.

When the sportsmen have mustered in goodly numbers, the master of the hounds gives the word, and, with a wave of his hand, and a "Hie over!" the huntsman throws the pack into cover. Silent, but with eager eyes, and chops ready to "give tongue," the beautiful, thoroughbred creatures, waving their long "sterns" (tails) like feathers, plunge into the thicket, and, with noses well down, thread rapidly to and fro, in and out, through its mazes. Presently the bell-note of a hound rings clear from the copse. If it is the cry of a trustworthy hound,—and the huntsman knows the voice of every

member of his pack,—he halloos "Hark to Chanter!" or whatever the name of the hound may be, which means that the rest of the pack is at once to make for Chanter, and aid him in hitting off the scent. Sometimes the first tongue is given by a young hound, and, if there be a suspicion that he has "opened" on a hare, or on anything except a fox, it is the business of one of the whips to ride up to the hapless deceiver, if possible, and admonish him with his whip-thong. Now a tremendous burst of hound-music comes from the whole pack, and every man settles himself firmly in his stirrups and tightens his reins, for it looks very like a "find." The cry recedes and grows fainter, as the pack gets away towards the farther side of the cover, for it is often difficult to make the fox "break," especially if the cover be large and close, and this is a moment of great anxiety with the huntsman and whips. Here, again, there comes to me a reminiscence from Leech,—one of those truthful touches of character that he never could have seized unless he had seen it. The first whip, "who is a little ruffled because the fox won't break," comes tearing along a spongy piece of ground by the cover-side, and roars out to a little cockney rider with a cigar, whom he has nearly knocked over, "Now, then, sir! out o' the way, unless you'll get into the cover. Mayhap your ugly mug might frighten him out!" At last the welcome cry of "Gone away!" is heard from some one of the watchers along the skirts of the thicket. The fox, finding himself hotly pressed by the hounds, and his proper retreat closed against him (the "earths" or holes in which the foxes burrow are attended to by the earth-stoppers the night before a hunt, while the foxes are out), has taken to the open country, and his purpose now is to make for the next cover, which may be miles distant; and there he goes up the slope yonder, with his belly almost touching the ground, and his brush sticking straight out behind!

Now the huntsman rings out a blast from his horn to bring the hounds together, as he gallops his horse to the spot where the fox broke. The gallant pack tears madly through the cover, and, as the hounds come plunging and bounding out from it, the huntsman lays them on by stooping low from his saddle, and waving his cap close down to the ground with a cheery "Halloo!" Then, with a tremendous burst from every throat, away go the hounds, "breast high," that is, with their heads well up, for well-bred fox-hounds never put their noses to the ground when the scent is hot. There they go at a terrific pace, — twenty-five or thirty couple of keen-scented, long-winded, ravenous pursuers, hot on the trail of one small, red-furred fugitive with a sharp nose, a sharper wit, and a long, bushy tail!

And now every man who means to ride to the hounds and see the hunt through must make up his mind for action, and that quickly. He who loiters now is thrown out for the day. The huntsman, now that his hounds are fairly off, takes his horse well in hand, and, dashing him at a fence that intervenes between him and the pack, clears it cleverly, gives head to his horse, and steers him straight on the line of chase. The two whips lag behind, for a moment, to look after any hounds that may come straggling from the cover, and then follow their leader. Such crack riders as happen to be out for the day then take their ground, each according to his own judgment. Some follow nearly on the line of the hounds. One or two swerve a little to the right or left, where they know that the ground is good for riding over; for every stanch rider to hounds does all he can during a run to spare his horse, and take as little out of him as possible. I remember an old sketch of Alken's, in which he shows the steady fox-hunter galloping through an open gate, while "snob" flies his horse over the fence within an inch of the hinge-post. Some old stagers, who are heavy weights now, and rather more careful of themselves than they used to be

twenty years ago, take to the lane, down which they gallop to a point from which they will find roads and easy field-riding in the direction for which the fox is heading. Probably there are one or two spills at the first fence after leaving cover, followed by the common incident of a horse careering away after the hounds without his rider. After two or three fences have been crossed, the field—that is the horse-men composing the hunt—begins to scatter. The best riders may be seen well to the front, keeping clear of each other as they go; for it is dangerous work to follow in one track, because, if one rider goes down, he is apt to trip up the next, and so on. The fences are of almost every variety. There are deep ditches, the banks of which are protected with stiff thorn hedges. Timber post-and-rail fences are common obstacles. Sometimes they are double, and it is nice work to hand a horse over the first one, with hardly room for him when he lands to gather himself for a leap over the next. Many hunting districts are intersected by wide and deep brooks, and these are a great terror to some otherwise plucky horses, that would face anything rather than water. "How did you get over the brook?" is a question commonly put to a man who has returned from a run with the hounds. Winding away there, far along the pastures, is a line of pollard willows, and they mark the course of the brook. The spotted hounds, so close together that one might "cover them with a blanket," as the old sporting phrase has it, have reached the line of willows, and are splashing and struggling across the brook. A momentary check after they have emerged from it, and now they are off again, breast high, and with but little music, for the pace is too severe for that, and the hounds of to-day are but poor musicians compared with those of a generation or two ago. Yonder comes a scattered troop of red-coats thundering down the pastures to the brook. There can be no shirking here, for it is well known that for a

mile or so the brook presents the same face, and that it has to be ridden over or into by him who would keep well with the hounds. Twenty horsemen charge it at twenty several points. Some get clear over in a fly. Three or four go bodily in, the water splashing so high over them as to make a spray-cloud in which an iris might sit, so that for a moment they are no longer seen,—dashing, impetuous riders, all, and given to going blindly at everything that offers. Here comes a stalwart farmer in a green coat and white hat, mounted upon a splendid iron-gray horse that sails over the water like a bird, and surges on after the chase with a long, swinging stride. A well-known horseman, on a fiery chestnut that has a trick of refusing his fences, is the next that faces the brook, for which he makes at a somewhat narrower spot between two pollard willows. His horse refuses, and veers round along the bank with a sudden swerve. Turning him straight round, with an exclamation that does not sound exactly like a blessing, the experienced rider rushes him back up the field some fifty yards, and then, bringing him round again, holds him with firm hands straight for the brook, cramming the spurs into him this time; and over it they go in beautiful style. It is not every horseman who could do *that*, and he is loudly cheered by two or three riders who have also got safely over, and are now rattling away by his side. And now the hounds have come to a check. The huntsman is with them, and is “making casts,” that is, cheering his hounds hither and thither with waves of his hand, obedient to which the pack spreads itself in every direction, now with noses well to the ground. Availing themselves of the check, experienced riders dismount, slacken girths, and lead their foaming horses up and down. At last a stanch old hound gives tongue, and bounds away at a furious pace. “Hark to Jupiter!” is now the word, and presently the chase is wheeling onward as hotly as before, the foremost riders,

reinforced by a few whom the check has enabled to come up, taking their ground as at the start. Immediately ahead, now, and about five or six miles from the start, there is another cover,—this time, perhaps, of the prickly shrub called gorse or furze. In this there are a couple of fox-earths, but whether these have been stopped or not is known to but few who are following the hounds. The fox has never been in view since he broke, but now his line is revealed to the riders by the chattering magpies that are fluttering over the hedge a little this side of the cover. These are long-tailed black-and-white birds, somewhat larger than the purple grackle of this country. They are very cunning and garrulous; and whenever a fox makes his appearance near them, they are sure to follow his course with much vituperative chatter and scathing shriek. As the chase nears the cover, the fox is in view for a short time, during which the hounds redouble their efforts, and strain every sinew and muscle, madened at the sight of him. Then he disappears in the prickly mazes of the gorse, into which the hounds soon plunge after him. The huntsman and three or four of the hard riders are up, and, following the hounds by such open spaces as they can find winding through this very embarrassing kind of cover, they see them lying and lolling about on the ground, baying every now and then at a hole that had once been a rabbit’s burrow, but which had some time since been enlarged and improved by Master Reynard into a dwelling for himself. And so, the fox has “gone to earth,” and the hunt is up for the day.

Or it may happen that the fox’s retreat has been cut off by the earth-stoppers, in which case he may either be run into and killed by the hounds in the cover, or he may get away again, and lead them another long spin over the country to some other well-known sanctuary of his, miles away, perhaps. When hounds have run into and killed a fox, they are whipped off for a mo-

ment, and the huntsman, having cut the fox's brush off, hands it to the rider who has first "come in at the death," by whom, according to etiquette, it is presented to any young Diana of the occasion who may chance to be up in time. The brush is affixed to the headstall of her horse's bridle as a trophy, and the fox is thrown to the vociferous and angry pack.

Of course, in the description just given, I have merely generalized the incidents of an English fox-hunt, so as to convey to those who never have seen one some idea of what it is like. No one fox-hunt is exactly like another, and with every pack of hounds many remarkable incidents and accidents occur in the course of a season. There are marvellous escapes to be recounted, and sometimes — though comparatively seldom — fatal falls. Broken collar-bones are the commonest of the severe accidents to which men are liable in the hunting-field; for a rider, in getting a "pure" or "cropper" (pet names for a fall), is very apt to pitch upon his shoulder and fracture a clavicle.

Once I witnessed a very remarkable incident in the way of a fall. The hounds had just come to a check, and a tall, heavy rider — a capital horseman he was, too — was urging his horse at full speed down a lane to come up with them. Just as he turned into the highway, there came along an immense drove of pigs on their way to the nearest market-town. Headlong in among them blundered the horse and his rider. The former plunged over with a tremendous crash, and broke his neck on the spot. The rider was pitched head foremost, and to a good distance, along the backs of the pigs, which broke his fall, and he got out of the scrape with a few slight bruises. Another accident which I remember hearing of at the time of its occurrence happened to a near-sighted man, who was continually making dangerous blunders with hounds, which he persisted, however, in following. One day, having come to a fence that he did not like, he rode a

little way along it to look for an easy place. Presently he came to what he probably supposed to be a low wall built across a gateway or gap. This he charged with his horse, which rolled over with him far away to the other side. The wall proved to be an old gray cow that was lying across the gap, and that threw the horse over by rising under him just as he jumped. In this case the rider's neck was broken, but the horse escaped unhurt. I also recall an incident of a very heavy man getting down into the bottom of a deep ditch with his horse atop of him. Neither of them could stir, being wedged into the narrow bottom of the ditch, the soft mud of which saved the fallen rider from sustaining any severe injuries. Spades were put in requisition, and man and horse were dug out after an hour's work.

Certain modern contrivances have gone far, in some parts of England, to embarrass the fox-hunter and render the sport less agreeable to him than it was a few years ago. Among these may be named the railway. Where the iron horse hunts, the other and older kind is apt to get into trouble. Railways are disagreeable, and in some cases dangerous, to sportsmen and hounds alike. But worse than the railway is the "invisible" wire fence, — an invention gradually creeping into use in the more closely cultivated counties. These fences are the most economical and convenient ones possible for the farmer, but to the horseman they oppose a very treacherous and break-neck hindrance. A horse will run full tilt against one without seeing it, and the consequences may be easily imagined. Long before wire fences came into general use, I witnessed an occurrence of this kind. The fence was on some ornamental grounds, near which the hounds met on the occasion referred to, and one of the sportsmen undertook, for a small wager, to leap his horse over it. Foolishly, he turned his horse from a distance and galloped him at the wire, which tripped him up as he half rose to clear it, and man and horse

came heavily to the ground, not much hurt, but coiled and tangled up in a very remarkable, not to say ludicrous, way, with wire fence.

Besides the larger establishments for hunting, there are, in many parts of the country, private packs of hounds kept on a smaller scale, and with these there is often excellent sport. As with the great establishments, everybody is welcome to join them in the field, and the greatest courtesy is always shown to strangers. Sometimes small subscription packs called "scratch" packs are to be met with. In these no particular attention is paid to the breeding and matching of the hounds, which are of all sizes and colors; and yet they generally manage to do their work very well.

Hare-hunting, although it resembles fox-hunting in its general features, yet varies from it in many respects, owing to the difference in the nature of the two animals, and to various other causes. Unlike the fox, the hare does not run far across country in a straight line, but tries to baffle her pursuers by doubling, as well as by many ingenious little stratagems peculiar to herself. Sometimes she will manage to get back on her own tracks, for instance, thereby greatly puzzling the hounds, who not unfrequently are discovered to be running *from* instead of *after* their game for a considerable distance. The English hare is of large size, nearly twice as large as the common one of this country, and different from it in many respects. Depending altogether on its speed for safety, it frequently lies out in the open country far away from any cover or place of refuge, and it never runs into the ground. When lying in the fields, it has such an extraordinary power of concealing itself that it will sometimes escape the notice even of the most practised eyes. Sometimes it squats in a furrow of a newly ploughed field, and you may never see it until you have almost touched it with your feet, when it is up and off with such wonderful speed that it is out of sight before you have had time to think

about it. It is quite a common thing — I have seen it twenty times at least — for a hare to spring up in the very middle of a pack of hounds engaged in beating a field, jump clear over every hound that makes a snap at her, get cleverly away, and beat them all in the long run. Were it not for a certain consciousness of cruelty in pursuing and worrying an animal so timid and harmless as the hare, one might say that the sport of hare-hunting is, in some respects, more fascinating than the chase of the fox. There is more of hunting proper in it, though less of actual hard riding. Many sportsmen, indeed, consider it the more scientific sport of the two. Sometimes, when poor puss is very hard pressed by the hounds, after a long and harassing run, when all her ingenious little wiles and tactics and stratagems have gone for nothing, and all hope has deserted her, she will give way to the most piteous cry I have ever heard from any creature. It is her death-cry, for the hounds are then just upon her, and in a moment there will be nothing seen of her but some flying tufts of fur.

The hounds used for the chase of the hare are smaller than fox-hounds, and not nearly so fast. They do not depend upon their speed for killing a hare, but run down their prey by sheer perseverance and by giving it no time to rest; and their cry is far more musical than that of the fox-hound. Sometimes old hares are to be met with that have grown gray in the cause of sport, having managed to baffle the hounds for many seasons. In some parts of the country, — and more especially in Ireland, — such hares as these are supposed by the country people to be gifted with supernatural qualities, and I have been in many a district where "the witch hare" was spoken of by the superstitious peasants with something like awe. In the hare-hunting districts there is a class of men called "hare-finders." They are usually idle, shiftless fellows of the poacher type, very sharp in all matters concerning game animals and sport. These men roam over the

fields and by the hedges early in the morning, in the neighborhood where the harriers are to meet. By long practice, added to natural acuteness of sight, they are able to see the hare as she squats on her "form," — the term used by sportsmen for the spot where a hare flattens herself out to elude observation. One of these men will come to the huntsman, and tell him that he has marked a hare and can bring him to the spot. In Ireland this is called "sohoing" a hare, and the hare-finder is called a "soho-man." A subscription is got up for the finder, who goes forward and puts the hare up some distance in advance of the hounds; and thus a good hunt may be obtained without any expenditure of time in beating the fields and hedges for the game. Long ago, but still within the present century, dwarf hounds known as "basket beagles" were often used for hunting hares. They were so called, because, to save them from unnecessary fatigue, they used to be driven to the place of meeting in a large creel placed upon a cart. The music of these little fellows is said to have been far superior to that of any hounds of the present day.

Deer-hunting, as now practised to some small extent in Great Britain, is not to be compared as a sport with the chase of either the fox or the hare. I do not here speak of the kind of sport pursued in the highlands of Scotland, — a fine, wild, manly sport, but one not coming within the province of this article, the deer there being run down with a sort of large greyhound, or shot with the rifle. The kind of deer-hunting to which I refer is rather a substitute for fox-hunting than otherwise, and has about it a certain amount of tameness, from the manner of its preparation and arrangements. The deer serving for this kind of sport is either the large red-deer or the ordinary fallow-deer of the English parks. It is taken to the place of meeting in a huge wooden box on wheels, where it is uncared when the proper time comes and given a certain number of minutes, "law," to get away before the hounds are laid on. Sometimes the

animal, perfectly familiar with a scene so often before enjoyed, declines altogether to segregate himself from the gay throng, and turns his attention to testing the succulent qualities of whatever herbage may be within his reach. He is usually got off at last, however, and men who think more of riding than of hunting frequently get satisfactory sport with a liberated deer. The sport, although rather an insipid one now, as I have said, has long been considered as a "royal" one. And so it is that her Majesty's buck-hounds are still maintained as a regular "institution," and the position of "Master of the Buck-Hounds" is continued as a high office.

Otter-hunting is only a local sport in the British Islands; the otter being scarce now, and confined to particular districts. The hounds used for hunting this creature are of a peculiar breed, somewhat resembling small fox-hounds, with a strain of the Skyeterrier in them, — ragged-looking fellows, with hairy muzzles and rough coats. Of course, horses are not used in the pursuit of the otter, which trusts for safety chiefly to its superior powers of swimming and diving. The otter-hunters carry spears, and the sport in general has a sort of savage association about it, carrying one back to the skin-clad javelin-men of ancient times.

Firm of muscle and sound of digestion are those old English fox-hunters, who pass half their time in the open air, never drink cocktails before breakfast, and live on the best of beef, bread, and port-wine. Recently some two or three specimens of this class have passed away, leaving to the providers of "Nimrod literature" a mine of wealth in the way of biographical reminiscence and anecdote. Among these departed heroes of the hunting-field was the late Sir Tatton Sykes, whose breakfast on a hunting morn, as described by his biographer, was a wonder in its way. Taking a shoulder of cold roast mutton, he would cut it into great "chunks," and these he would immerse, fat and all, in a huge bowl of milk. To this he would add a good-

sized apple-pie, cut up in pieces to suit, and then he would make short work of the mess with a spoon.

I have no desire to combat modern theories on the subject of gastronomy

and the hygiene of food, but I will add that Sir Tatton Sykes was never known to have had a day's illness during his life, and that he was eighty-six years old, or thereabouts, when he "went to earth."

GERMAN SONGS, AND A FEW OTHER MATTERS.

COME here, my wife Bertha, and sit down beside me on our quiet veranda for a little while, before the summer evening grows too chill. I was not reading just now when you bade me put down my book and look at the new moon over my right shoulder. I was not reading, but dreaming. Dreaming of a long time ago, before I knew you,—of that pleasant summer when you were fishing for trout, among the mountains of Pennsylvania, and I was wandering along the Bergstrasse northward from Heidelberg. It was the Frohnleichnams-Fest, or Corpus-Christi day, and the villages were alive with processions. The streets were strewn with flowers; there were banners, music, glittering ecclesiastical dresses in the front, sadly solemn holiday-makers in the rear. Following these, but not going with them to the churches, was another little procession of pilgrims to the shrine of an older religion, in the forest of Odin. Four were Burschen and two Philistines. The four were Teutons, and had a right to seek the home of their great ancestor; the two were of a race which has also a right to go anywhere and seek anything. It is a people to which I am partial, since it is in direct violation of Mr. D'Israeli's theory of "pure races" that it is working out the problem, "How to make the best spoon or spoil the biggest horn yet known." Of course the two were Americans,—representatives of North and South, according to the two capital M's of each, Maryland or Massachusetts. If any one wishes to know further whether we

could also boast the two capital B's, Boston and Baltimore, they may inquire at the publishers'.

Ours was a pleasant company. Youth, the Rhine, June, foot-travel, and never a care to weight the knapsacks, ought to make it pleasant for any reasonable soul. It is a dim dream to me now, my dear, as I sit under our green leaves in this quiet village street, with its close-shut prospect, but it was a glorious reality then as we toiled up the Melibocus, and saw the great Rhine valley broaden beneath. We looked across to the blue, cloudy ranges of the Vosges, and afar to Strasburg, and down on Mannheim and Worms and Speyer, on the river twining like a thread of silver embroidery on green velvet, on the railways running like straight seams across the level plain.

That last is tailor-like, but your present occupation, my wife, put it into my head. I will try to give you a better notion of what we saw.

Do you know Po'keepsie? And College Hill? Stand upon it, then; multiply it by three, put it into the centre of Dutchess County. Then take our heavy garden-roller multiplied into itself till you are tired, and with that smooth away all between you and the base of the Catskills. Push the Shawangunk Chain and the Fishkill Highlands back from the river a dozen miles, and then arrange in a huge triangle the same,—Hudson in the centre, very much twisted, and a good deal thinner and shallower by being so much drawn out. That is what we saw with the outward eye. But there ran a river of

life through that valley, such as our great-great-grandchildren will hardly see in any American water-course's bed,—the great ebbing and flowing tide-stream of Europe's life. Siegfried and Chriemhild and Günther (not he according to whom all things are to be done, but the wild hero-king of the Nibelungenlied); Cæsar the bridge-builder, Varus and Herrmann, Charles the Fifth and Luther, Tallard and Marlborough, Napoleon and Blücher; wave on wave, down to the Prussian *corps d'armée* which came pouring through the defiles of the Rheinpfalz to put down the insurrections of Forty-Eight;—all this we might have beheld, and a deal more, but we had business farther on. We were going into the forest, to see that monstrous block of hewn stone, the "Giant's Column," which centuries ago Roman tools, it is said, cut laborious out in memory of a victory, but had not engineering skill enough to set upright. A patriotic Fatherland proposed to set it up on the field of Leipsic, but the money or the pulleys of the Fatherland proved inadequate. It would be a handsome freight for the Great Eastern. And we scrambled down the Felsenmeer, an emancipated stone-quarry, looking like a little patch of the *débris* of the Great Deluge, which Dame Nature, in tidying up our world, had somehow overlooked.

It was dark that night when we got to Lindenfels. And into *such a Gasthaus* went we! I arose in the morning, and, for my bath,—behold, a small piedish, over which presided a superannuated beer-bottle holding brevet rank as a water-pitcher! But all was forgotten as we stepped into the open air beneath the frowning ruins of the Castle of Lindenfels. Such June days visit us now and then, as distinguished foreigners with a conventional incognito glorify our shores, but they are to the manor born in the Odenwald. I remember one such in this country,—that day in June which Professor Lowell set to the exquisite music of the prelude to the first part of Sir Launfal; but,—as

he very properly observed,—"What is so rare as a day in June?" I remember only that one. We had them by the week-full in the Odenwald. There was a breezy stir in the air, an elastic lift and quickening of the frame which came with each breath; the sun clapped you on the back with a "Good day, comrade," instead of hitting you from the shoulder with fist doubled; and your first step on the greensward promised thirty miles ere bedtime.

And then the scenery. Midway between the tameness of a public highway and the awful monotony of an American forest, it was all that is pleasant and nought that is tiresome in either. It was the heart of the forest, and upon the way to the Wild-Huntsman's Castle of Roderstein. We followed the foot-path and bridle-road through grain-fields all unfenced, so that between the tall green stems thick set we could see the scarlet poppies and blue corn-flowers interwoven, as the wind brushed gently over the surface, like the colors which come and go in a shot silk,—a warp and woof of Nature's weaving with the shuttle of the ploughshare. You do not see the flowers themselves,—save one or two close at hand,—but the colors of the flowers; and my comparison, if not poetical, is true.

Along those pleasant paths we tramped; across brooks with worn stepping-stones, and so into the cool wood-sides, not, like ours, all a-tangle with cat-briers and underbrush, but clean and trim, the forest children having gleaned up the fallen twigs till it was like a park, and left none of that sad, oppressive sense of decay and waste which our woods have. From my childhood, I have had a vague terror in the woods because of their closeness. It always seems as if their thick green coverts harbored something which might spring upon me, or hide some one who could see me and laugh at me if I grew enthusiastic. Or else I felt shut in and could see nothing, any more than a man in a prairie with the grass higher than his head. But these clear, breezy shades

were charming and gladsome as the forests of fairy-land.

When did I ever see fairy-land? Often, my child, in days when I was young enough to visit it, after half past eight at night, per special train of Queen Mab's conducting. I found my childhood's dream here. For on one hand were the feathery larch plantations; on the other, dark fir groves, weeping-birches in the valleys, oaks in the open glades; and out of the summer noontide stillness, as we rested under the Wild Jäger's tree, broke the sweet, startling coo of the wood-pigeon. Here, in our land, man seems to have his grasp upon the soil as it were upon the mane of an untamed colt, but there he sits firmly in his saddle upon the well-broken steed. Solitude in the Old World is not necessarily loneliness; but, get lost on a prairie or in John Brown's Tract, and you are alone. I have crossed a Tyrolese pass without meeting a single human being from morning till night; but, though the foot-path vanished in open heath, the map in my pocket and the lines of the bare hill-tops were perfect guides, and I had quite as much conversation as in a whole day's railroad-travel has sometimes happened to me.

And so no sense of loneliness haunts the solitudes of the heart of the Odenwald. I do not think we, as a people, love the woods much, except we go there to shoot. We do not often ramble in them, or make picnic parties there; we think of them as places where we wet our feet, tear our clothes, and scratch our faces. But the European has a passion for the woods, and you can make the hearts of the London and Paris cockneys rejoice and be glad in no surer way than by inviting them into the forests of Epping or Fontainebleau. In fact, one cannot feel Shakespeare's songs, or the English ballads of Robin Hood, without having for scenery a European and not an American greenwood. There must be open glades for the deer to graze in, and plenty of bridle-paths along which the fat monks and proud shire-reeves

may travel. Fancy yourself, dear, as Maid Marian practising archery in the cedar swamps, where there is scarce room for robin-redbreast to fly.

By why, you ask me, does this little book remind me of those dear old days, when forty miles of foot-travel was no impossibility between dawn and dreaming again? (Romancing? No, my love, I assure you I once did it, through the mistake of a guide who made a short cut and took us ten miles out of our road; and the next day I was awfully knocked up by it, but that we need n't tell the public, you know.) I will tell you why. It is a book of German songs, and here and there in it are familiar words which then beguiled our way and measured our tramp by music. Of course our company sang. Did I not tell you they were German students on their vacation, and so sang as naturally as the bee sings in a clover-lot? One of the student-songs expressly has it:—

"Who neither can love nor drink nor sing,
Him scorneth the Bursch for a pitiful thing."

I did not say I sang. Perhaps it was of me that the Herr Professor —, when the Göttingen students asked him if any one in America sang worse than he did, was thinking when he answered, "One man." It was not; but you know there is no antecedent probability against it. But *they* sang, — Max sang, Otto sang, the Herr Baron sang. And such songs! I thought of the party with whom in the golden days of youth I went sailing on the seas to explore remotest Provincetown and see the Fourth of July kept, and what we Americans of the *sangre azul*, with college diplomas in our pockets (figuratively speaking), sang, — negro melodies all, — "the irrepressible Ethiop," the sad and silly slip-slop of Christy's, mere burnt-cork and lamp-black. One dismal fag-end of chorus we were specially prone to; we repeated it at evening anchor when drifting amid the fogs off Chatham, upon the sands of the Shovel-ful Shoal, by the cliff of Gayhead, and in the Bay of Buzzards. Even for this we were indebted to the captain who

piloted us from where, in shame and confusion of face, we picked it up. But out of the German heart there flows a river of perennial song, as in that Odenwald flows the fountain at which Siegfried drank his last draught, and which is bubbling there to-day as fresh as ever.

And this book which I hold dear, and the others which stand beside on the third lower shelf in my study there, are full of German songs such as I heard them sing that June day. They are songs. Poor Poe once said of a poem he was reviewing: "This queer composition is entitled a song, and we should like very much to hear Mr. Channing (the author) sing it." He might have said this in good sooth and not in irony of any of the nine hundred and ninety-nine German songs. They are all to be sung, and it is a pleasant process to hear their authors sing them. They are written, like Moore's melodies, to the music, and not *set* to it like our American lyrics, which means stuck to it by a sort of harmonic Spalding's glue. We have read of airs married to immortal verse, but the "immortal verses" of our composers seem all to have contracted *mariages de convenance*. These of Germany have come out of the heart of a people whose speech, like that of the Witch in Thalaba, is song. You think, don't you, that the German is harsh? and you have an idea that the Italian is musical; which faith is grounded principally upon our friend Miss Manikin's "rendering" of operatic *morceaux*, and the accents of the beggar who flattered your dog, not to say yourself, and cost me an eleemosynary dime which loads my conscience to this day. But did you ever hear German gentlemen and ladies conversing, or Neapolitan fishwomen squabbling? There is another side of the case to be heard, may it please your Honor.

The German language flows into rhythmic and rhyming order without effort. Our English is stiff and rigid, with its inevitable couplets, in comparison.

I have translated Wordsworth's "We are Seven" into very tolerable German, but I should like to see Brooks or Longfellow get it back again without the help of the original. Shakespeare is capitally rendered in German, but how spiritless are our best versions of Schiller! excepting Coleridge's, which are paraphrases rather than translations. In fact the German can translate us, while we are obliged to paraphrase him, save now and then where the kindred Saxon lineage shows itself in identical words and phrases, and a line translates itself. But German verse twists its rhymes easily this way and that, as a child bends its pliant little body and limbs. There is many and many a song I know of which has a musical subtlety of composition perfectly imitable, and no more to be translated than a pun out of English into French.

You thought German poetry was mystical and in the clouds? No, my Bertha, no more than French cookery is all pepper and mustard. Those are Yankee errors borrowed from that big blunderer, Bull, who growls at everybody from his own immaculate island. German prose is mystical when it treats of mystical things, but the German language has a greater power of precise statement than our own. The very obscurity of German thought arises out of the fine capacity of German words for hair-splitting definitions. German poetry in general is straightforward enough. Even the second part of Faust is lucid, provided the same principle of exegesis be applied as that by which we interpret hot coals in the fire, — every man to see what he pleases therein; and Faust is a very stream of crystal compared to Browning's Sordello.

But my little book opens of itself to one song my friend sang, — that charming one of Uhland's, "The Landlady's Little Daughter." Translate it for you? No, it has been better done than I can do it, and you shall hear our friend Max Helfenstein sing it some day. But I will tell you its story. "Three students were travelling over

the Rhine." Handsome young fellows, I know they were, with little caps of three colors set on their long curls, with amber mustaches soft as the silk of Indian corn, and with great blue Teutonic eyes, and fresh, fair cheeks, with a bit of a scar, perhaps, on one. "They stopped," it says, "when they came to the landlady's sign." Of course their first question — for Rhineland roads are dusty — was for beer and wine, and next for the landlady's little daughter. And Frau Wirthin answers that her beer and wine are as good as ever, but her little daughter lies ready for the grave. And they come quietly and sadly enough into the death-chamber, where she lies in the black coffin; and the first student, who has never seen her, turns back the shroud and looks long and earnestly upon the sweet, pale face, and says: "Wert thou but living now, I would love thee from this time henceforth." And the second covers again the well-remembered features, and turns weeping away, saying: "I have loved thee long." But the third once more lifts up the veil, and kisses brow and mouth, and, with a sorrow passing tears, says: —

"I have loved thee ever, I love but thee,
And thee will I love through eternity."

There was another pretty song in the dialect spoken in the Bavarian Highlands, of which the refrain ran: —

"When I come, when I come, when I once more
come,
I return, my love, to thee."

It is a little *Volkstied*, but full of the simple, direct affection of humble life, which does not trouble itself about fine phrases any more than he who sings it about fine clothes. It is true to the sentiment of the wandering trade's-apprentice and the faithful plain-faced maiden who waits for him at home. But it is a capital marching-song, such a one as you can step out to with a jolly, swinging stride.

It is a strange but profitable life, that roving one of the *Handwerksbursch*, for he sees all that Ulysses saw, "men and cities," and he learns the best ways

of doing his appointed work which anywhere are practised. Even the German waiters travel, to study the hotel-keeping fashions of all Europe. I have met them in London coffee-houses painfully acquiring the "yes-sir," "arf an' arf, sir," "rosemutton 'nd 'tatoes, sir," of the London Ganymedes, and exchanging their "gleich! gleich!" for the "d'reckly, sir," with which the modern Francis of Eastcheap has replaced the "anon, anon," of Falstaff's and Bardolph's time. For, my dear, in the season all nations meet at the German *table d'hôte*, and every civilized people has its little peculiarities. And, therefore, as home-keeping waiters, like other youth, will have but homely wits, the German Kellner is found far and wide learning English in the intervals of duty out of a greasy copy of the Vicar of Wakefield, — I suppose because the good Dr. Goldsmith was also a freeman of the guild of foot-travellers; and Italian out of "I Promessi Sposi"; and French — no, my dear, though you often remind me that "Calypso, not being able to console herself after the departure of," etc., the German does not need to drink at that fountain in his maturer years; he knew all about French, except its accent, before he got out of his school-boy jacket.

But you have led me into a digression, and so lost all that I had to tell you about the great tree-trunk in the heart of Vienna, which is set with nails until it is mail-clad, and into which every blacksmith's-apprentice coming to Vienna must hammer a new one; and you have also lost the story one of the craft told me as we walked from Neckar-Steinach to Heidelberg. I must get back to my song-birds again. This little book, *Bertha*, is a collection of German songs. You see, to save room, they are printed like prose; whereas our bards always make obvious to the eye that metrical quality which the ear might perhaps fail to find out. Economy of space *versus* economy of time. I have my finger on one of them, and if you will take it in a rough version, I will read it to you, it is so full of the spirit

of vagabond life in the German summer time : —

"A farthing and a penny
Were in this purse of mine ;
The farthing went for brown-bread,
The penny went for wine."

"The maidens and the landlords
They cry, 'Alack and woe,'
The landlords when I linger,
The maidens when I go."

"My boots they hang in tatters,
My stockings they are strings,
Yet out upon the meadows
The small bird blithely sings."

"O, were there ne'er a tavern "
(*"Morial,"* as the minstrel of Villikins
and his Dinah says)

"I'd bide in peace at home,
And had the cask no spigot
I could not drink therefrom."

This same gentleman, one would think, must have been the hero of Von Müller's capital song, of which the *nai-veté* is hardly transferable into English. (I observe all great poets say this when they have fears that their translations will not produce the required sensation.) But such as I can do you shall receive : —

"Here I come out of the tavern 'all right.'
Street, thou presentest a wonderful sight ;
Right hand and left hand, now this side, now that,
Street, thou 'rt in liquor, — I see it, that 's flat !

"What a squint countenance, moon, hast thou got ;
One eye he opens and one keeps he shut ;
Clearly I see it, moon, thou must be mellow ;
Shame on thee, shame on thee, jolly old fellow."

"There go the lamp-posts, which used to stand still,
Spinning around like the wheel of a mill,
Dancing and prancing to left and to right ;
Seems to me everything 's tipsy to-night."

"All topsy-turvy, both little and great ;
Shall I go on and endanger my pate ?
That were presuming. No, no, it is plain,
Better go back in the tavern again."

There are plenty more convivial songs, of all degrees of merit, from Schiller's sentimental "*Morschlied*" to one which I heard roared out in a Tyrolese *Wirthshaus* to a tune very like the infant-school song of

"Children go, to and fro,
In a merry, pretty row ;

of which chorus and song were principally repetitions of the words "*Bairisch Bier*." But there are other things to sing of besides drink. I wish some-

body would take up Uhland, and, picking out a half dozen poems I could select, give them in first-rate versions. I cannot do it, my love ; I can sit down with my dictionary and render word for word into passable doggerel imitations ; but to get the soul, "to catch the aroma of a pound of tea," so to speak, as Vivian Grey proposed to the Marquis of Carabas in making punch, is another matter. They say Capri wine loses its flavor if you take it even to Rome, and that the fragrant Steinberger should never be uncorked save upon the banks of the Rhine. So it is with these delicious little German songs : they cannot stand a sea-voyage.

There is a river-song of Uhland's. A boat gliding down a river, its passengers all strangers, and sitting silent. By and by the old forester draws from under his blouse his hunting-horn, and tries a familiar air ; the wandering apprentice is moved to unscrew the head and ferrule of his staff, and takes out of that his flute ; and the pretty girl, with her brown hair neatly braided, — and no ugly bonnet, we may be sure, — finds courage, after a glance or two at her blushing face in the water, to add her voice. The oarsmen catch up the chorus, and the echoes join and repeat, and we may be sure the sun seems to shine out more brightly and the smooth water to break into more sparkling ripples, — though the song does not say so, — and that every one is kind and friendly. Then the keel slips gently on to the smooth sandy shore, and the little company breaks up quite saddened at parting.

"Farewell, brothers, e'er shall we
In one bark together be?"

There is a rippling motion of the lines, which is very suggestive, and which the double rhymes, so abundant in German, help to cause.

There is a very wild gypsy song of Goethe's, which I often croon over, because of its chorus. I will try to remember it for you : —

"In the whirl of the mist, in the deep snow,
In the wild wood, in the winter night,

I heard the wolves' long hunger-howl,
I heard the boding cry of the owl.
Wille, wau, wau, wau,
Wille, wo, wo, wo,
Wito, hu!

"I shot one day a cat by the hedge,
Annie, the witch's old black cat.
Seven wehr-wolves came in the night to me,
Each an old wife of the village was she.
Wille, wau, wau, wau, etc.

"I knew them all and I knew them well;
The Annie, the Ursel, the Bess,
The Lisa, the Barb'ra, the Eva, the Kate;
They howled in a ring around my gate.
Wille, wau, wau, wau, etc.

"I named them all by their names aloud,
What wilt thou Annie, what wilt thou Bess?
Themselves they wriggled, themselves they shook,
And howling homeward their way they took.
Wille, wau, wau, wau,
Wille, wo, wo, wo,
Wito, hu!"

I wish I could hit as literally Goethe's serenade. But there is an untranslatable felicity which some German poems have, of repeating, as in this one, the third line of the preceding stanza as the first of the next, and keeping the same ending for each stanza. It is like a braid of gold and silver cord, where the same thread appears again under each entwining. Rückert and Heine both do the same. And, as I mention Heine, what a vision of Germany comes to me! His two volumes which I have here on my table are a series of pictures. He seems to have set life to music; and his life opera begins with a dark tragic overture, to end in the most comic and yet the saddest of finales. Love and despair, or love and satiety; and then the mocking chorus of the "Germania" at the close. His songs are little sketches,—a lonely street, and a figure pacing before an empty house; a watcher at the street-corner looking up at lighted windows; a voyager gazing at the stormy North Sea waves; the sea-beach with the mists rolling in from beyond the light-house; —a passionate investiture of all natural objects with the burning Nessus-shirt of the wearer. The water-lily pining for the moon (who is masculine in German, as the sun is the triumphant representative of the woman's-rights question), the moon looking up from the

lake to meet the water-lily's gaze; — all nature is the victim, according to Heine, of an "unrequited," or "prior, attachment." Then comes the time when nothing is too sacred for the daring muse, and then there are poems which no one of English blood ever would or could translate, being worse than atheistic.

But intermingled with these are the tenderest and loveliest of little poems, and, as I said, the most comic. When I first read his "Deutschland," I laughed till I cried over his description of his breaking down in his post-chaise in the forest, and the wolves' assembling around, and the speech he makes to persuade them that he was a fellow-sympathizer with them, and had advocated the cause of the sheep only to save appearances.

I can turn, I find, to a little poem of his, — to one of his many lady-loves, — which I like very much for its simplicity, and which blends his two moods very prettily: —

"My child, we both were children,
Two children blithe and gay,
When we used to creep in the hen-house,
And hide ourselves in the hay.

"We crowed just as the cocks crow,
To puzzle the passers-by;
Kikerikee! they thought it
The genuine cockerel cry.

"On the big chests in our garret
Old shawls and carpets we laid;
We lived in them together,
And a famous house we made.

"The old cat of our neighbor
Came often on us to call;
We met her bows and courtesies
With complimentings and all.

"We asked after all her kindred,
Carefully naming each one,
As with many an ancient tabby
We have often since then done.

"We sat and we talked like the old folks
In a solemn head-shaking way;
Complaining that all things were better,
Far better, than now, in our day;

"That Love and Truth and Believing
Out of the world were fled;
And coffee was so much dearer,
And money so scarce, we said.

"Gone are the childish fancies;
And flying like dreams of youth
Are the World and the Times and the Money,
Believing, and Love, and Truth."

If you like that, — and, having been a child, I think you must, — here is one more of Heine's, upon a different key, — one of his melancholy love-songs, which young gentlemen, between the ages of nineteen and twenty-two, should such read the Atlantic, are requested not to omit: —

"I love a flower, yet which it is I know not,
And thence there comes my pain;
And one by one each blossom cup I gaze in,
And seek a heart again.

"The flowers are fragrant to the day's declining,
The nightingale is heard:
I seek a heart as fair and fond as mine is,
A heart as deeply stirred.

"The nightingale is singing, and I listen
The mystery of her moan;
To both of us it is so lone and dreary
So dear and lone."

Sentimental enough, I dare say; but as we grow older, my dear wife, we love sentiment. It is a harmless beverage, — the *eau sucrée* which, when one is hot and dusty with the hard work of life, is very cooling and refreshing. Do you say I am getting prosy? For that I shall inflict another stanza on you, — "The Origin of the Watch." Says Heine: —

"Tell me who first the clock found out,
Parcelling hours and minutes out?
It was a shivering, sorrowful one,
Who sat and thought in the midnight lone,
And counted the steps of the knowing mouse,
And the death-watch's click in the weary house."

The antithesis to this, — he who invented kisses, — is not so good, so I will not translate it; but instead the little song which Heine calls "Doctrin," merely premising, my child, that the principle of Hegel's philosophy has been thus summed up, "Nothing is, but everything is going to be."

"Rattle the drumsticks and never fear,
And merrily kiss the vivandière;
That is the whole of learning's sphere,
That is the big book's chiefest care.

"Drum up the people out of their sleep;
Beat the reveille with youthful arm,
Drumming and marching ever ahead;
That is the sum of learning's charm.

"That's the Hegelian philosophy,
The pith of the books both great and small;
I found it out because I am wise,
And because I'm a skilful drummer withal."

The charm of most of his little poems, however, lies partly in the deep passion poured out in them, and their exquisite little pictures of German out-door life. They are like vignettes or marginal etchings, such as, if I were rich enough, I would have to a unique copy of "Hyperion" that I have devised. I don't know of anybody save Tennyson who has written such in English. For a true song is just a single thought in a rich setting. There are love-poems which may be sung, and also many other poems which suffer the same change in the sea of music; but songs they can hardly be called. Men sometimes, — not often, — express themselves, in moments of great feeling, lyrically; but when they simply sing, it is not because they are thinking much, but just want to let out a pleasant or tender emotion in a simple way through music. Negro melodies, real ones, are a fair example of the singing impulse. The idea is subordinated to the air. Negro melodies manufactured are utterly opposed to every true principle of song-making; are such as, except for sale, no mortal ever would dream of making. So are all Scotch songs not written by Scotchmen, and sea-songs not written by sailors, convivial ditties written by young gentlemen in the Sophomore year of college, and the miscellaneous "poems" so entitled in most volumes of verse. A true song is one that will come into one's head as he walks in the woods of a pleasant day, and that runs over the lips unconsciously. He who writes one good song in his life may rest, like single-speech Hamilton, on his laurels. I think I should like to write a lecture, my dear, on songs and song-writing, and illustrate it out of Burns, Mother Goose, Shakespeare, and Mrs. Hemans.

But my books have taken me away from where I began, — my *Wanderjahre* in Germany and Switzerland. For then I too was apprentice, to learn this craft I am now so painfully practising, — the art or mystery of living my life, — and so went to see other men's lives. They are before me now in my mind's eye, the companions of those pleasant times.

Grave professor of chemistry, do you remember them, and how we were often irreverent at your fondness for the clear fragrant honey of the Alps, and over your Alpenstock, which we likened to the spear of Goliath of Gath? And you, mighty Orientalist! *Du, mein braver Camerad*, who could never away with my fancy of feeding the stray dogs that sniffed wistfully at our suppers in the little *Gasthaus* or *trattoria*; and thou too, O most dauntless of pedestrians, with whom I made that mad night-scamble down the side of the Faulhorn,—shall we ever meet again?

Do you remember, boys, how we rode triumphantly into Milan with one quarter-franc, the sole pecuniary relic of our Swiss tour? Have you forgotten the ex-contractor of the Erie Railroad, whom we met upon the Simplon, and who stood in pleased wonder at that mighty work, exclaiming, "Why, they must have engineers in Europe, and have had them some time too?"

Have you forgotten our glorious march from Chamouni to Osières, and our night at the Hospice of St. Bernard? Whatever else we learnt in those brave days, we certainly did discover the use of our legs, and that brandy is the pedestrian's *vade-mecum*; not internally, O Neal Dow! but poured into one's shoes, against which use the law of Maine hath no provision. These German *Wanderlieder* bring you all before me,—countrymen of whom I am proud and who since have proved well the value of your foreign apprenticeship.

And now, my dear wife, I am going to turn from you to the public ear, and say a word for pedestrianism. I suppose these lines of mine, if they are, by favor of the indulgent editors of *Maga*, read at all, save by the committee of publication, will be perused in railway cars where the peripatetic boy who offers you "m'xd caandies" and "Stuart's fresh gumm-drops," is followed by another with a heap of miscellaneous literature. And I beg the reader to put gravely before himself this propo-

sition: Are you, my dear fellow, knowing anything about the country through which you are driving at the rate of three quarters of a mile a minute? And then I beg you to ask yourself, is this country worth seeing?

There are in this State in which I now am writing,—my State, by adoption and grace,—Connecticut, at least four beautiful rivers,—the Housatonic, the Naugatuck, the Thames, and the Connecticut, whose valleys are full of as lovely scenery as can well be found in the most celebrated of European lands. There are no grand associations, that is true; but if you have ever travelled, you know better than I can tell you that association is a matter which depends very much upon previous culture and immediate mood. I remember being immoderately merry at Chillon; and to have sat down on one of the stone seats of the Coliseum to read letters from home, full of little Emma's and wee Maggie's sayings and doings, and to have given them the precedence even over the Emperor Commodus and the early Christian martyrs. But lovely scenery one can almost always feel and enjoy. And if you are, as I trust, a politically inclined citizen, a knowledge of what THE PEOPLE are feeling and thinking may be invaluable to you. American statesmanship, let me say, in passing, has declined fifty per cent at least in the last ten years, for want of just that sort of knowledge. We have had men trained for public life, not (where they should have been) among those who represent the real interests of the land,—the farmers and mechanics and merchants and manufacturers,—that is, those who *make* as well as those who profit by the making of our fabrics,—but among editors in their dens, vote-distributors, village and city wire-pullers, and the secondary symptoms, so to speak, of the public movements. If a man would get at the country's sound interior sense, he must go to headquarters. "It is better," as dear old Professor G— at Cambridge was so fond of telling his law students, "*petere fontes, quam sectari rivos*," or, to English it, bet-

ter to put your bucket in the well than to turn on the Croton, if you wish to know what spring-water really is. If pedestrian travel could only be made fashionable, as it is in Europe, what a deal of prejudice and holiday-clothes parade might be spared us. Here in New England the mind of the masses is at the mercy of the artful demagogue, in spite of various ingenious ventilators made and provided, because in so many ways the masses are first persuaded what they ought to say and then taught to say it. I do not suppose that pedestrianism is a patent medicine for all local or district disorders; but I do say that if you want to

know what a people is, you must travel among them, not be whisked through them. And if a young man wishes to lay in a good stock of health, a knowledge of his countrymen, and a fairer experience of men and things than he can get either in college or the counting-house, he had better take up knapsack and staff, and explore either those valleys just named, the recesses of the White Hills, the little-known and glorious nooks of the Ramapo, the Berkshire glens, or the backwoods of Maine, instead of trusting himself merely to impressions picked up in hotel bar-rooms at Saratoga, Niagara, Newport, or Sharon Springs.

THE BRICK MOON.

[From the Papers of Captain Frederic Ingham.]

I.

PREPARATION.

I HAVE no sort of objection now to telling the whole story. The subscribers, of course, have a right to know what became of their money. The astronomers may as well know all about it, before they announce any more asteroids with an enormous movement in declination. And experimenters on the longitude may as well know, so that they may act advisedly in attempting another brick moon or in refusing to do so.

It all began more than thirty years ago, when we were in college; as most good things begin. We were studying in the book which has gray sides and a green back, and is called "Cambridge Astronomy" because it is translated from the French. We came across this business of the longitude, and, as we talked, in the gloom and glamour of the old south middle dining-hall, we had going the usual number of students' stories about rewards offered by the Board of Longitude for discoveries in that matter, — stories, all

of which, so far as I know, are lies. Like all boys, we had tried our hands at perpetual motion. For me, I was sure I could square the circle, if they would give me chalk enough. But as to this business of the longitude, it was reserved for Q. to make the happy hit and to explain it to the rest of us.

I wonder if I can explain it to an unlearned world, which has not studied the book with gray sides and a green cambric back. Let us try.

You know then, dear world, that when you look at the North Star, it always appears to you at just the same height above the horizon or what is between you and the horizon: say the Dwight School-house, or the houses in Concord Street; or to me, just now, North College. You know also that, if you were to travel to the North Pole, the North Star would be just over your head. And, if you were to travel to the equator, it would be just on your horizon, if you could see it at all through the red, dusty, hazy mist in the north, — as you could not. If you were just half-way between pole and equator, on the line

between us and Canada, the North Star would be half-way up, or 45° from the horizon. So you would know there that you were 45° from the equator. Here in Boston, you would find it was $42^\circ 20'$ from the horizon. So you know here that you are $42^\circ 20'$ from the equator. At Seattle again you would find it was $47^\circ 40'$ high, so our friends at Seattle know that they are $47^\circ 40'$ from the equator. The latitude of a place, in other words, is found very easily by any observation which shows how high the North Star is; if you do not want to measure the North Star, you may take any star when it is just to north of you, and measure its height; wait twelve hours, and if you can find it, measure its height again. Split the difference, and that is the altitude of the pole, or the latitude of you, the observer.

"Of course, we know this," says the graduating world. "Do you suppose that is what we take the Atlantic for, to have you spell out your miserable elementary astronomy?" At which rebuff I should shrink distressed, but that a chorus of voices an octave higher comes up with, "Dear Mr. Ingham, we are ever so much obliged to you; we did not know it at all before, and you make it perfectly clear."

Thank you, my dear, and you, and you. We will not care what the others say. If you do understand it, or do know it, it is more than Mr. Charles Reade knew, or he would not have made his two lovers on the island guess at their latitude, as they did. If they had either of them been educated at a respectable academy for the Middle Classes, they would have fared better.

Now about the longitude.

The latitude, which you have found, measures your distance north or south from the equator or the pole. To find your longitude, you want to find your distance east or west from the meridian of Greenwich. Now if any one would build a good tall tower at Greenwich, straight into the sky, — say a hundred miles into the sky, — of course if you and I were east or west of it, and

could see it, we could tell how far east or west we were by measuring the apparent height of the tower above our horizon. If we could see so far, when the lantern with a Drummond's light, "ever so bright," on the very top of the tower, appeared to be on our horizon, we should know we were eight hundred and seventy-three miles away from it. The top of the tower would answer for us as the North Star does when we are measuring the latitude. If we were nearer, our horizon would make a longer angle with the line from the top to our place of vision. If we were farther away, we should need a higher tower.

But nobody will build any such tower at Greenwich, or elsewhere on that meridian, or on any meridian. You see that to be of use to the half the world nearest to it, it would have to be so high that the diameter of the world would seem nothing in proportion. And then, for the other half of the world you would have to erect another tower as high on the other side. It was this difficulty that made Q. suggest the expedient of the Brick Moon.

For you see that if, by good luck, there were a ring like Saturn's which stretched round the world, above Greenwich and the meridian of Greenwich, and if it would stay above Greenwich, turning with the world, any one who wanted to measure his longitude or distance from Greenwich would look out of window and see how high this ring was above his horizon. At Greenwich it would be over his head exactly. At New Orleans, which is quarter round the world from Greenwich, it would be just in his horizon. A little west of New Orleans you would begin to look for the other half of the ring on the west instead of the east; and if you went a little west of the Feejee Islands the ring would be over your head again. So if we only had a ring like that, not round the equator of the world, — as Saturn's ring is around Saturn, — but vertical to the plane of the equator, as the brass ring of an artificial globe goes, only far higher in proportion, —

"from that ring," said Q., pensively, "we could calculate the longitude."

Failing that, after various propositions, he suggested the Brick Moon. The plan was this: If from the surface of the earth, by a gigantic pea-shooter, you could shoot a pea upward from Greenwich, aimed northward as well as upward; if you drove it so fast and far that when its power of ascent was exhausted, and it began to fall, it should clear the earth, and pass outside the North Pole; if you had given it sufficient power to get it half round the earth without touching, that pea would clear the earth forever. It would continue to rotate above the North Pole, above the Feejee Island place, above the South Pole and Greenwich, forever, with the impulse with which it had first cleared our atmosphere and attraction. If only we could see that pea as it revolved in that convenient orbit, then we could measure the longitude from that, as soon as we knew how high the orbit was, as well as if it were the ring of Saturn.

"But a pea is so small!"

"Yes," said Q., "but we must make a large pea." Then we fell to work on plans for making the pea very large and very light. Large,—that it might be seen far away by storm-tossed navigators: light,—that it might be the easier blown four thousand and odd miles into the air; lest it should fall on the heads of the Greenlanders or the Patagonians; lest they should be injured and the world lose its new moon. But, of course, all this lath-and-plaster had to be given up. For the motion through the air would set fire to this moon just as it does to other aerolites, and all your lath-and-plaster would gather into a few white drops, which no Rosse telescope even could discern. "No!" said Q. bravely, "at the least it must be very substantial. It must stand fire well, very well. Iron will not answer. It must be brick; we must have a Brick Moon!"

Then we had to calculate its size. You can see, on the old moon, an edifice two hundred feet long with any of the fine refractors of our day. But no

such refractors as those can be carried by the poor little fishermen whom we wanted to befriend, the bones of whose ships lie white on so many cliffs, their names unreported at any Lloyd's or by any Ross,—themselves the owners, and their sons the crew. On the other hand, we did not want our moon two hundred and fifty thousand miles away, as the old moon is, which I will call the Thornbush moon, for distinction. We did not care how near it was, indeed, if it were only far enough away to be seen, in practice, from almost the whole world. There must be a little strip where they could not see it from the surface, unless we threw it infinitely high. "But they need not look from the surface," said Q.; "they might climb to the mast-head. And if they did not see it at all, they would know that they were ninety degrees from the meridian."

This difficulty about what we call "the strip," however, led to an improvement in the plan, which made it better in every way. It was clear that even if "the strip" were quite wide, the moon would have to be a good way off, and, in proportion, hard to see. If, however, we would satisfy ourselves with a moon four thousand miles away, *that* could be seen on the earth's surface for three or four thousand miles on each side; and twice three thousand, or six thousand, is one fourth of the largest circumference of the earth. We did not dare have it nearer than four thousand miles, since even at that distance it would be eclipsed three hours out of every night; and we wanted it bright and distinct, and not of that lurid, copper, eclipse color. But at four thousand miles' distance the moon could be seen by a belt of observers six or eight thousand miles in diameter. "Start, then, two moons,"—this was my contribution to the plan. "Suppose one over the meridian of Greenwich, and the other over that of New Orleans. Take care that there is a little difference in the radii of their orbits, lest they 'collide' some foul day. Then, in most places, one or other, perhaps

two, will come in sight. So much the less risk of clouds: and everywhere there may be one, except when it is cloudy. Neither need be more than four thousand miles off; so much the larger and more beautiful will they be. If on the old Thornbush moon old Herschel with his reflector could see a town-house two hundred feet long, on the Brick Moon young Herschel will be able to see a dab of mortar a foot and a half long, if he wants to. And people without the reflector, with their opera-glasses, will be able to see sufficiently well." And to this they agreed: that eventually there must be two Brick Moons. Indeed it were better that there should be four, as each must be below the horizon half the time. That is only as many as Jupiter has. But it was also agreed that we might begin with one.

Why we settled on two hundred feet of diameter I hardly know. I think it was from the statement of dear John Farrar's about the impossibility of there being a state house two hundred feet long not yet discovered, on the sunny side of old Thornbush. That, somehow, made two hundred our fixed point. Besides, a moon of two hundred feet diameter did not seem quite unmanageable. Yet it was evident that a smaller moon would be of no use, unless we meant to have them near the world, when there would be so many that they would be confusing, and eclipsed most of the time. And four thousand miles is a good way off to see a moon even two hundred feet in diameter.

Small though we made them on paper, these two-hundred-foot moons were still too much for us. Of course we meant to build them hollow. But even hollow there must be some thickness, and the quantity of brick would at best be enormous. Then, to get them up! The pea-shooter, of course, was only an illustration. It was long after that time, that Rodman and other guns sent iron balls five or six miles in distance, — say two miles, more or less, in height.

Iron is much heavier than hollow

brick, but you can build no gun with a bore of two hundred feet now, — far less could you then. No. Q. again suggested the method of shooting off the moon. It was not to be by any of your sudden explosions. It was to be done as all great things are done, — by the gradual and silent accumulation of power. You all know that a fly-wheel — heavy, very heavy on the circumference, light, very light within it — was made to save up power, from the time when it was produced to the time when it was wanted. Yes? Then, before we began even to build the moon, before we even began to make the brick, we would build two gigantic fly-wheels, the diameter of each should be "ever so great," the circumference heavy beyond all precedent, and thundering strong, so that no temptation might burst it. They should revolve, their edges nearly touching, in opposite directions, for years, if it were necessary, to accumulate power, driven by some waterfall now wasted to the world. One should be a little heavier than the other. When the Brick Moon was finished, and all was ready, it should be gently rolled down a gigantic groove provided for it, till it lighted on the edge of both wheels at the same instant. Of course it would not rest there, not the ten-thousandth part of a second. It would be snapped upwards, as a drop of water from a grindstone. Upward and upward; but the heavier wheel would have deflected it a little from the vertical. Upward and northward it would rise, therefore, till it had passed the axis of the world. It would, of course, feel the world's attraction all the time, which would bend its flight gently, but still it would leave the world more and more behind. Upward still, but now southward, till it had traversed more than one hundred and eighty degrees of a circle. Little resistance, indeed, after it had cleared the forty or fifty miles of visible atmosphere. "Now let it fall," said Q., inspired with the vision. "Let it fall, and the sooner the better! The curve it is now on will forever clear the world;

and over the meridian of that lonely waterfall, — if only we have rightly adjusted the gigantic flies, — will forever revolve, in its obedient orbit, the Brick Moon, the blessing of all seamen, — as constant in all change as its older sister has been fickle, and the second cynosure of all lovers upon the waves, and of all girls left behind them." "Amen," we cried, and then we sat in silence till the clock struck ten; then shook each other gravely by the hand, and left the hall.

Of waterfalls there were plenty that we knew.

Fly-wheels could be built of oak and pine, and hooped with iron. Fly-wheels did not discourage us.

But brick? One brick is, say, sixty-four cubic inches only. This moon, — though we made it hollow, — see, — it must take twelve million brick.

The brick alone will cost sixty thousand dollars!

II.

The brick alone would cost sixty thousand dollars. There the scheme of the Brick Moon hung, an airy vision, for seventeen years, — the years that changed us from young men into men. The brick alone, sixty thousand dollars! For, to boys who have still left a few of their college bills unpaid, who cannot think of buying that lovely little Elzevir which Smith has for sale at auction, of which Smith does not dream of the value, sixty thousand dollars seems as intangible as sixty million sestertia. Clarke, second, how much are sixty million sestertia stated in cowries? How much in currency, gold being at 1.37½? Right; go up. Stop, I forget myself!

So, to resume, the project of the Brick Moon hung in the ideal, an airy vision, a vision as lovely and as distant as the Brick Moon itself, at this calm moment of midnight when I write, as it poises itself over the shoulder of Orion, in my southern horizon. Stop! I anticipate. Let me keep — as we say in Beadle's Dime Series — to the even current of my story.

Seventeen years passed by. We were no longer boys, though we felt so. For myself, to this hour, I never enter board meeting, committee meeting, or synod, without the queer question, What would happen should any one discover that this bearded man was only a big boy disguised? that the frock-coat and the round hat are none of mine, and that, if I should be spurned from the assembly as an interloper, a judicious public, learning all the facts, would give a verdict, "Served him right." This consideration helps me through many bored meetings which would be else so dismal. What did my old copy say? "Boards are made of wood, they are long and narrow." But we do not get on!

Seventeen years after, I say, or should have said, dear Orcutt entered my room at Naguadavick again. I had not seen him since the Commencement day when we parted at Cambridge. He looked the same, and yet not the same. His smile was the same, his voice, his tender look of sympathy when I spoke to him of a great sorrow, his childlike love of fun. His waistband was different, his pantaloons were different, his smooth chin was buried in a full beard, and he weighed two hundred pounds if he weighed a gramme. O, the good time we had, so like the times of old! Those were happy days for me in Naguadavick. At that moment my double was at work for me at a meeting of the publishing committee of the Sandemanian Review, so I called Orcutt up to my own snugery, and we talked over old times; talked till tea was ready. Polly came up through the orchard and made tea for us herself there. We talked on and on, till nine, ten at night, and then it was that dear Orcutt asked me if I remembered the Brick Moon. Remember it? of course I did. And without leaving my chair, I opened the drawer of my writing-desk, and handed him a portfolio full of working-drawings on which I had engaged myself for my "third" * all that winter.

* "Every man," says Dr. Peabody, "should have a vocation and an avocation." To which I add, "A third."

Orcutt was delighted. He turned them over hastily but intelligently, and said: "I am so glad. I could not think you had forgotten. And I have seen Brannan, and Brannan has not forgotten." "Now do you know," said he, "in all this railroading of mine, I have not forgotten. I have learned many things that will help. When I built the great tunnel for the Cattawissa and Opelousas, by which we got rid of the old inclined planes, there was never a stone bigger than a peach-stone within two hundred miles of us. I baked the brick of that tunnel on the line with my own kilns. Ingham, I have made more brick, I believe, than any man living in the world!"

"You are the providential man," said I.

"Am I not, Fred? More than that," said he; "I have succeeded in things the world counts worth more than brick. I have made brick, and I have made money!"

"One of us make money?" asked I, amazed.

"Even so," said dear Orcutt; "one of us has made money." And he proceeded to tell me how. It was not in building tunnels, nor in making brick. No! It was by buying up the original stock of the Cattawissa and Opelousas, at a moment when that stock had hardly a nominal price in the market. There were the first mortgage bonds, and the second mortgage bonds, and the third, and I know not how much floating debt; and, worse than all, the reputation of the road lost, and deservedly lost. Every locomotive it had was asthmatic. Every car it had bore the marks of unprecedented accidents, for which no one was to blame. Rival lines, I know not how many, were cutting each other's throats for its legitimate business. At this juncture, dear George invested all his earnings as a contractor, in the despised original stock, — he actually bought it for $3\frac{1}{2}$ per cent, — good shares that had cost a round hundred to every wretch who had subscribed. Six thousand eight hundred dollars — every cent he had — did

George thus invest. Then he went himself to the trustees of the first mortgage, to the trustees of the second, and to the trustees of the third, and told them what he had done.

Now it is personal presence that moves the world. Dear Orcutt has found that out since, if he did not know it before. The trustees who would have sniffed had George written to them, turned round from their desks, and begged him to take a chair, when he came to talk with them. Had he put every penny he was worth into that stock? Then it was worth something which they did not know of, for George Orcutt was no fool about railroads. The man who bridged the Lower Rapidan when a freshet was running was no fool.

"What were his plans?"

George did not tell, — no, not to lordly trustees, — what his plans were. He had plans, but he kept them to himself. All he told them was that he had plans. On those plans he had staked his all. Now would they or would they not agree to put him in charge of the running of that road, for twelve months, on a nominal salary. The superintendent they had had was a rascal. He had proved that by running away. They knew George was not a rascal. He knew that he could make this road pay expenses, pay bondholders, and pay a dividend, — a thing no one else had dreamed of for twenty years. Could they do better than try him?

Of course they could not, and they knew they could not. Of course, they sniffed and talked, and waited, and pretended they did not know, and that they must consult, and so forth and so on. But of course they all did try him, on his own terms. He was put in charge of the running of that road.

In one week he showed he should redeem it. In three months he did redeem it!

He advertised boldly the first day: "*Infant children at treble price.*"

The novelty attracted instant remark. And it showed many things. First, it showed he was a humane man, who wished to save human life. He would

leave these innocents in their cradles, where they belonged.

Second, and chiefly, the world of travellers saw that the Crichton, the Amadis, the perfect chevalier of the future, had arisen, — a railroad manager caring for the comfort of his passengers!

The first week the number of the C. and O.'s passengers was doubled: in a week or two more, freight began to come in, in driblets, on the line which its owners had gone over. As soon as the shops could turn them out, some cars were put on, with arms on which travellers could rest their elbows, with head-rests where they could take naps if they were weary. These excited so much curiosity that one was exhibited in the museum at Cattawissa and another at Opelousas. It may not be generally known that the received car of the American roads was devised to secure a premium offered by the Pawtucket and Podunk Company. Their receipts were growing so large that they feared they should forfeit their charter. They advertised therefore for a car in which no man could sleep at night or rest by day, — in which the backs should be straight, the heads of passengers unsupported, the feet entangled in a vice, the elbows always knocked by the passing conductor. The pattern was produced which immediately came into use on all the American roads. But on the Cattawissa and Opelousas this time-honored pattern was set aside.

Of course you see the result. Men went hundreds of miles out of their way to ride on the C. and O. The third mortgage was paid off; a reserve fund was piled up for the second; the trustees of the first lived in dread of being paid; and George's stock, which he bought at 3½, rose to 147 before two years had gone by! So was it that, as we sat together in the snugger, George was worth wellnigh three hundred thousand dollars. Some of his eggs were in the basket where they were laid; some he had taken out and placed in other baskets; some in nests where various hens were brooding over them. Sound eggs they were, wherever

placed; and such was the victory of which George had come to tell.

One of us had made money!

On his way he had seen Brannan. Brannan, the pure-minded, right-minded, shifty man of tact, man of brain, man of heart, and man of word, who held New Altona in the hollow of his hand. Brannan had made no money. Not he, nor ever will. But Brannan could do much what he pleased in this world, without money. For whenever Brannan studied the rights and the wrongs of any enterprise, all men knew that what Brannan decided about it was wellnigh the eternal truth; and therefore all men of sense were accustomed to place great confidence in his prophecies. But, more than this, and better, Brannan was an unconscious dog, who believed in the people. So, when he knew what was the right and what was the wrong, he could stand up before two or three thousand people and tell them what was right and what was wrong, and tell them with the same simplicity and freshness with which he would talk to little Horace on his knee. Of the thousands who heard him there would not be one in a hundred who knew that this was eloquence. They were fain to say, as they sat in their shops, talking, that Brannan was not eloquent. Nay, they went so far as to regret that Brannan was not eloquent! If he were only as eloquent as Carker was or as Barker was, how excellent he would be! But when, a month after, it was necessary for them to do anything about the thing he had been speaking of, they did what Brannan had told them to do; forgetting, most likely, that he had ever told them, and fancying that these were their own ideas, which, in fact, had, from his liquid, ponderous, transparent, and invisible common sense, distilled unconsciously into their being. I wonder whether Brannan ever knew that he was eloquent. What I knew, and what dear George knew, was, that he was one of the leaders of men!

Courage, my friends, we are steadily advancing to the Brick Moon!

For George had stopped, and seen Brannan; and Brannan had not forgotten. Seventeen years Brannan had remembered, and not a ship had been lost on a lee-shore because her longitude was wrong,—not a baby had wailed its last as it was ground between wrecked spar and cruel rock,—not a swollen corpse unknown had been flung up upon the sand, and been buried with a nameless epitaph,—but Brannan had recollected the Brick Moon, and had, in the memory-chamber which rejected nothing, stored away the story of the horror. And now, George was ready to consecrate a round hundred thousand to the building of the Moon; and Brannan was ready in the thousand ways in which wise men move the people to and fro, to persuade them to give to us a hundred thousand more; and George had come to ask me if I were not ready to undertake with them the final great effort, of which our old calculations were the embryo. For this I was now to contribute the mathematical certainty and the lore borrowed from naval science, which should blossom and bear fruit, when the Brick Moon was snapped like a cherry from the ways on which it was built, was launched into the air by power gathered from a thousand freshets, and, poised at last in its own pre-calculated region of the ether, should begin its course of eternal blessings in one unchanging meridian!

Vision of Beneficence and Wonder!
Of course I consented.

O, that you were not so eager for the end! O, that I might tell you, what now you will never know,—of the great campaign which we then and there inaugurated! How the horrible loss of the Royal Martyr, whose longitude was three degrees awry, startled the whole world, and gave us a point to start from. How I explained to George that he must not subscribe the one hundred thousand dollars in a moment. It must come in bits, when "the cause" needed a stimulus, or the public needed encouragement. How we caught neophyte editors, and explained to them

enough to make them think the Moon was wellnigh their own invention and their own thunder. How, beginning in Boston, we sent round to all the men of science, all those of philanthropy, and all those of commerce, three thousand circulars, inviting them to a private meeting at George's parlors at the Revere. How, besides ourselves, and some nice, respectable-looking old gentlemen Brannan had brought over from Podunk with him, paying their fares both ways, there were present only three men,—all adventurers whose projects had failed,—besides the representatives of the press. How, of these representatives, some understood the whole, and some understood nothing. How, the next day, all gave us "first-rate notices." How, a few days after, in the lower Horticultural Hall, we had our first public meeting. How Haliburton brought us fifty people who loved him,—his Bible class, most of them,—to help fill up; how, besides these, there were not three persons whom we had not asked personally, or one who could invent an excuse to stay away. How we had hung the walls with intelligible and unintelligible diagrams. How I opened the meeting. Of that meeting, indeed, I must tell something.

First, I spoke. I did not pretend to unfold the scheme. I did not attempt any rhetoric. But I did not make any apologies. I told them simply of the dangers of lee-shores. I told them when they were most dangerous,—when seamen came upon them unawares. I explained to them that, though the costly chronometer, frequently adjusted, made a delusive guide to the voyager who often made a harbor, still the adjustment was treacherous, the instrument beyond the use of the poor, and that, once astray, its error increased forever. I said that we believed we had a method which, if the means were supplied for the experiment, would give the humblest fisherman the very certainty of sunrise and of sunset in his calculations of his place upon the world. And I said that whenever a man knew his place in this world, it

was always likely all would go well. Then I sat down.

Then dear George spoke,—simply, but very briefly. He said he was a stranger to the Boston people, and that those who knew him at all knew he was not a talking man. He was a civil engineer, and his business was to calculate and to build, and not to talk. But he had come here to say that he had studied this new plan for the longitude from the Top to the Bottom, and that he believed in it through and through. There was his opinion, if that was worth anything to anybody. If that meeting resolved to go forward with the enterprise, or if anybody proposed to, he should offer his services in any capacity, and without any pay, for its success. If he might only work as a bricklayer, he would work as a bricklayer. For he believed, on his soul, that the success of this enterprise promised more for mankind than any enterprise which was ever likely to call for the devotion of his life. "And to the good of mankind," he said, very simply, "my life is devoted." Then he sat down.

Then Brannan got up. Up to this time, excepting that George had dropped this hint about bricklaying, nobody had said a word about the Moon, far less hinted what it was to be made of. So Ben had the whole to open. He did it as if he had been talking to a bright boy of ten years old. He made those people think that he respected them as his equals. But in fact, he chose every word, as if not one of them knew anything. He explained, as if it were rather more simple to explain than to take for granted. But he explained as if, were they talking, they might be explaining to him. He led them from point to point,—oh! so much more clearly than I have been leading you,—till, as their mouths dropped a little open in their eager interest, and their lids forgot to wink in their gaze upon his face, and so their eyebrows seemed a little lifted in curiosity,—till, I say, each man felt as if he were himself the inventor, who had bridged difficulty

after difficulty; as if, indeed, the whole were too simple to be called difficult or complicated. The only wonder was that the Board of Longitude, or the Emperor Napoleon, or the Smithsonian, or somebody, had not sent this little planet on its voyage of blessing long before. Not a syllable that you would have called rhetoric, not a word that you would have thought prepared; and then Brannan sat down.

That was Ben Brannan's way. For my part, I like it better than eloquence.

Then I got up again. We would answer any questions, I said. We represented people who were eager to go forward with this work. (Alas! except Q., all of those represented were on the stage.) We could not go forward without the general assistance of the community. It was not an enterprise which the government could be asked to favor. It was not an enterprise which would yield one penny of profit to any human being. We had therefore, purely on the ground of its benefit to mankind, brought it before an assembly of Boston men and women.

Then there was a pause, and we could hear our watches tick, and our hearts beat. Dear George asked me in a whisper if he should say anything more, but I thought not. The pause became painful, and then Tom Coram, prince of merchants, rose. Had any calculation been made of the probable cost of the experiment of one moon?

I said the calculations were on the table. The brick alone would cost \$60,000. Mr. Orcutt had computed that \$214,729 would complete two fly-wheels and one moon. This made no allowance for whitewashing the moon, which was not strictly necessary. The fly-wheels and water-power would be equally valuable for the succeeding moons, if any were attempted, and therefore the second moon could be turned off, it was hoped, for \$159,732.

Thomas Coram had been standing all the time I spoke, and in an instant he said: "I am no mathematician. But I have had a ship ground to pieces under me on the Laccadives because our

chronometer was wrong. You need \$250,000 to build your first moon. I will be one of twenty men to furnish the money; or I will pay \$10,000 tomorrow for this purpose, to any person who may be named as treasurer, to be repaid to me if the moon is not finished this day twenty years."

That was as long a speech as Tom Coram ever made. But it was pointed. The small audience tapped applause.

Orcutt looked at me, and I nodded. "I will be another of the twenty men," cried he. "And I another," said an old bluff Englishman, whom nobody had invited; who proved to be a Mr. Robert Boll, a Sheffield man, who came in from curiosity. He stopped after the meeting; said he should leave the country the next week, and I have never seen him since. But his bill of exchange came all the same.

That was all the public subscribing. Enough more than we had hoped for. We tried to make Coram treasurer, but he refused. We had to make Haliburton treasurer, though we should have liked a man better known than he then was. Then we adjourned. Some nice ladies then came up, and gave, one a dollar, and one five dollars, and one fifty, and so on,—and some men who have stuck by ever since. I always, in my own mind, call each of those women Damaris, and each of those men Dionysius. But those are not their real names.

How I am wasting time on an old story! Then some of these ladies came the next day and proposed a fair; and out of that, six months after, grew the great Longitude Fair, that you will all

remember, if you went to it, I am sure. And the papers the next day gave us first-rate reports; and then, two by two, with our subscription-books, we went at it. But I must not tell the details of that subscription. There were two or three men who subscribed \$5,000 each, because they were perfectly certain the amount would never be raised. They wanted, for once, to get the credit of liberality for nothing. There were many men and many women who subscribed from one dollar up to one thousand, not because they cared a straw for the longitude, nor because they believed in the least in the project; but because they believed in Brannan, in Orcutt, in Q., or in me. Love goes far in this world of ours. Some few men subscribed because others had done it: it was the thing to do, and they must not be out of fashion. And three or four, at least, subscribed because each hour of their lives there came up the memory of the day when the news came that the — was lost, George, or Harry, or John, in the —, and they knew that George, or Harry, or John, might have been at home, had it been easier than it is, to read the courses of the stars!

Fair, subscriptions, and Orcutt's reserve,—we counted up \$162,000, or nearly so. There would be a little more when all was paid in.

But we could not use a cent, except Orcutt's and our own little subscriptions, till we had got the whole. And at this point it seemed as if the whole world was sick of us, and that we had gathered every penny that was in store for us. The orange was squeezed dry!

EARTHQUAKES OF THE AMERICAN CONTINENTS.

THE student has often to regret that the aboriginal peoples of the American continents left no records which tell us anything concerning their physical history. The convulsions which affected these lands before the beginning of the sixteenth century, their floods, their earthquakes, and volcanic eruptions, must remain forever unknown to us, except where the antiquarian may be able to find some faint trace of them in the myths and traditions of the perishing races of the New World. It would not be profitable, in an investigation requiring that the information which it seeks should be accurate, to endeavor to unravel those puzzling traditions wherein the impression made by some great accident of nature is mingled with the effects of centuries of superstition. The only human record of the convulsions of the New World which can serve our purpose begins with the Spanish colonization, about three centuries and a half ago, and thus covers only about one tenth of the time which is contained in the chronicles of the Old World. Though comparatively brief, this time has been long enough to have given us a formidable chapter of accidents exceedingly destructive to life and property, potent in their influence on the development of the peoples subjected to their action, and very instructive to the naturalist who seeks in these convulsions an explanation of the forces which affected the surface of the earth before man became a witness of their action.

Although we have no authentic record of any earthquakes before the Spanish conquest, we may safely infer that the aborigines of Mexico and South America were as much exposed to these convulsions as their successors have been. The style of the structures erected by the ancient Mexicans and Peruvians is as well suited for the resistance of earthquake shocks as that

of modern fortifications for the protection of their occupants against projectiles. Buildings chiefly of one story, with walls of the most massive character, — loftier edifices arranged as terraced pyramids, — secured features admirably fitted to insure permanence on an unstable soil. With an architectural skill apparently sufficient to have produced any of the simple reliefs, such as the tower, spire, or obelisk, these nations seem never to have constructed any edifices of that nature. It may be answered that a people as little exposed to earthquakes as the Egyptians built in the same stable manner, and that another in one of the most frequently shaken regions of the earth, the Calabrians, have not learned the simple lesson which it might be supposed would have been taught them by their long experience. It cannot be denied that the objection has weight; but the Egyptians raised the obelisk quite as often as the pyramid, and the Calabrians have been deterred by a spirit of religious fatalism from learning any lessons which their frequent misfortunes might have taught them. The history of architecture among all peoples leads us to believe that the desire to erect lofty structures is almost a natural instinct; and when we fail to find any trace of them among the relics of a people whose skill would have enabled them to build such edifices, we are justified in seeking in circumstances some explanation of that absence. Human edifices tend to grow upwards as much as trees; and just as we are warranted in seeking a reason for the stunted form of the firs of Labrador, whose centuries of growth have not lifted their branches six feet above the earth, so we are justified in demanding a reason for the dwarfed character of the architectural monuments of the ancient nations of Mexico and Peru.

The continents of North and South America show but little sympathy in their earthquake movements; it is very rarely that any shock which has affected the one has influenced the other. The southern continent has received probably nineteen twentieths of the earthquake violence which has affected the New World. These disturbances have in the main been limited to two regions: that on the west coast including the whole chain of the Andes, and the tablelands which border the range on either side; and that on the north including the mountainous country on the south shore of the Caribbean Sea, between Lake Maracaibo and the island of Trinidad near the delta of the Orinoco. Although in some cases disturbances originating in one of these areas have propagated their movements in the other region, usually the convulsions of each area have exercised no marked effect on the territory of the other. As a general rule, the convulsions of the greatest violence in South America have extended their devastating effects over a wider range than the destructive shocks of the Old World. That of Lisbon, in 1755, shook a larger part of the earth's surface than any South American shock is known to have done; but the area within which the shock proved very destructive was comparatively limited. The Andean earthquakes have frequently proved exceedingly destructive along a line more than a thousand miles in length, though their east-and-west extension has rarely exceeded one hundred and fifty miles. The convulsions of the northern earthquake area, bordering on the Caribbean Sea, have generally been more like the Lisbon shock in their character,—the shock moving in every direction from a centre of impulse, gradually diminishing in force on all the lines radiating from that centre. The whole of the Lesser Antilles share in these commotions, which generally originate in Venezuela. Many earthquakes—such as the several great convulsions which devastated Caracas—have affected all the West In-

dies, and propagated their shocks as far as the shores of Central America. And in one case, at least,—that of the earthquake of 1811,—there seemed to be some sympathy between the movements of the earth in the valley of the Mississippi and the disturbances which occurred on the northern coast of South America. The whole basin of the Caribbean may be regarded as belonging to one earthquake area; for, although the greater number of the shocks occurring there are local, many have been perceived throughout the basin.

When Columbus, in his third voyage, landed on the south shore of the Caribbean Sea, the Indians still preserved a tradition of a great earthquake which they said had rent asunder the shore of the continent, and formed the Gulf of Cariaco. It is scarcely to be believed that this important arm of the sea, having a length of over fifty miles and a breadth of over four or five, could have been torn off from the continent. Its northern shore is evidently a part of the coast range of mountains, and not the result of a recent geological accident. It is, however, by no means improbable that a subsidence of the shore, accompanying an earthquake movement, may have admitted the sea into an existing valley, and thus formed this sound. There seems little doubt that this widespread tradition referred to some great earthquake which had effected important changes in the coast lines of this part of the continent.

The menace of earthquake disturbance which this tradition gave has been quite fulfilled. In 1530 there came a great shock: a mountain on the shore of the Gulf of Cariaco was rent, and from the fissure there poured forth a great volume of salt-water mixed with asphaltum. A sea-wave rolled in immediately after the shock, which overwhelmed the fort and garrison at Cumana, and did great damage to the habitations of the young colony. Owing to the ravages of the white ants, we have no original records of this colony more than two centuries old, and may thus be unacquainted with many

of the earlier earthquakes. In the latter part of the last century, in the years 1766, 1794, and 1797, there occurred three remarkable convulsions. The first of these destroyed Cumana, and shook the whole northern shore of South America: such great disturbances of the surface of the soil took place that the ground was said to have moved like a boiling liquid. The extreme violence is attested by the fact that the Indians, not unaccustomed to such accidents, celebrated by feasts the approaching destruction and regeneration of the world. The shock of 1794, though violent, did not prove destructive enough to merit especial mention.

Three years later, however, in 1797, there occurred an earthquake which entirely overwhelmed the city of Cumana, killing a large part of its inhabitants. Though terrible in its intensity, this earthquake seems to have been confined to a very small area. The shock and the sound which accompanied it were like those which would have been produced by springing a mine beneath the city. Humboldt states that half an hour before the shock a strong smell of sulphur was perceived, and that at the same time flames appeared on the banks of the river Manzanares and in the Gulf of Cariaco.

Flames rising from the ground are not uncommon phenomena in this portion of the continent, and are not necessarily connected with earthquakes. The first of the many recorded changes produced by earthquakes on the shore line of South America was effected by this shock. Some slight alterations in the topography of the shoals near the entrance to the harbor of Cumana were observed.

The great crescent of islands which extends from near the mouth of the Orinoco to Cuba, — a distance of over two thousand miles, — has been throughout more or less subject to earthquakes. All portions of this great archipelago have not however been equally exposed to their ravages. The largest of the islands, Cuba, has enjoyed comparative

immunity, while its neighbor Jamaica has suffered from many destructive convulsions. The former of these islands is, strictly speaking, outside of the basin of the Caribbean, and therefore removed from the sphere of operations of the earthquakes originating beneath that sea.

Jamaica was the first of the Antilles to suffer from earthquakes. In 1667 the island was shaken from the centre to the sea. Great masses of rock were torn from the mountains, but, the population being small, the destruction of life was not great. On the 1st of March, 1687, came the second memorable shock. The earth appeared to rise and fall like waves of the sea, and all the buildings on the island were much damaged. Vessels in the harbor of Port Royal were very singularly shaken, many of them being much injured by the violent concussion which was propagated through the water. Five years later, in 1692, came the greatest earthquake, probably, which has ever visited the island. It occurred on the morning of the 7th of June, between eleven o'clock and noon. Three fourths of the houses in the capital town of Port Royal were thrown down, killing three thousand of the inhabitants. A large part of the ruined city sank beneath the sea, so that ships could ride over the spot where the most substantial houses of the place had stood. The subsidence seemed to take place at the very moment of the shock. Throughout the island the effects upon the surface of the earth were very great. At one point a tract of land of more than one thousand acres sank beneath the sea. The reports of the shock by eye-witnesses repeat the often-doubted assertion that fissures opened and closed as the shocks passed through the earth. In one of these chasms it is stated that an inhabitant of the island, Louis Gelday, was swallowed up, but ejected uninjured by the next movement of the earth, an instant after.

As in most great convulsions of this nature, the principal shock was succeeded by a long-continued series

of movements of a slight character. This trembling of the earth continued until the volcanic eruption at St. Kitts, which occurred some weeks afterwards, quieted the subterranean disturbance. Several times since the great shock of 1692, severe earthquakes have visited Jamaica. Those which occurred in 1794, 1812, and 1834 were the most disastrous, all proving very destructive to life and property. The distribution of earthquake shocks throughout the other parts of the Caribbean Islands is quite peculiar, some of the islands having enjoyed a happy immunity from destructive shocks ever since their settlement, others having been even more unfortunate than Jamaica. Cuba, for instance, has been unharmed by any great accident of this kind, though from time to time particular parts of it have been considerably shaken: the most destructive of these local shocks was that which visited St. Jago and the region thereabouts. Hayti and Porto Rico have been equally fortunate in escaping the severest effects of the earthquake violence which has proved so very disastrous to the neighboring islands. It is among the Lesser Antilles, which form the remarkable band of islands stretching from Hayti to Trinidad, that we find the most destructive results of earthquake action. In St. Croix and St. Thomas the melancholy history of a long struggle of northern energy with convulsions of earth and air has apparently been ended by a series of hurricanes and earthquakes which have quite destroyed the prosperity of the islands. The incidents of these harrowing calamities are too fresh in the mind of the public to require mention here. The island of Tortola, which was swept over during this convulsion by an earthquake wave, was rent asunder by the earthquake of 1785, a new island being formed. Our accounts of this remarkable event are not sufficiently detailed to enable us to form an idea of the precise character of the movement which brought the separation about. Owing to the fact that most of the

other islands of the Lesser Antilles were settled at a much later date than those above mentioned, we know less of their earthquake history. With the exception of Barbadoes, which lies very much to the eastward of the main chain of islands, and is thus, like Cuba, beyond the region of the greatest violence, they all have been sharers in the disturbances which have affected this basin; Martinique and Guadeloupe having been the most unfortunate.

The northern shore of South America was again visited by a great convulsion in the year 1812, when, at about four o'clock on the 26th of March, after a very hot day, there came a great shock which affected the whole of the provinces of Venezuela, Maracaibo, and Varinas. This earthquake was the most extensive in its range and the most destructive in its effects, of any which have ever occurred on this shore. The intensity of the shock varied very much, however, at different points; in some places the ground is said to have resembled a boiling liquid, great masses of rock were detached from the mountains at many different places, and at Valencia an enormous volume of muddy water burst forth. About one year earlier the volcano of St. Vincent, which had been at rest for about a century, began to be again active; frequent shocks announced the increased disturbance in the region beneath the mountain; one month after the great earthquake the eruption began by an ejection of cinders, and on the 30th of April the lava broke forth and ran down into the sea.

The earthquakes which have desolated the north and east shores of the Caribbean Sea have been equalled in intensity by those which have affected its western coast. The earthquakes of Central America have been quite as terribly destructive as any of those before mentioned; though, as they acted upon a less civilized and less thickly settled country, the records of their action are not so complete. Soon after the settlement of the country, in 1565, there occurred a shock of considerable

severity in connection with an outbreak of the volcano of Paraya. In 1586 the city of Guatemala was ruined: this, like the preceding shock, was followed by a volcanic eruption, the outlet for the pent-up force being in this case the volcano of Fuego, near the devastated city. In 1798 and 1820 the city was again very much shaken and the region thereabouts much affected by severe earthquakes. The last very destructive shock occurred in September, 1841. By this convulsion all the cities and towns of Costa Rica were ruined, and throughout a great part of this region not a single building was left standing. Unlike most earthquakes of this region, which have usually extended their disturbances very little beyond the territory known as Central America, this shock was felt all over Mexico and a considerable part of the United States. Yucatan is included in the seismic area of Central America, being affected, though in a less degree than Guatemala, by the shocks which disturb that area.

Thus it is seen that the shores of the Caribbean Sea are even more unfortunate than the borders of the Mediterranean. Excepting the island of Cuba, which, as said before, belongs rather to the Gulf of Mexico than to the Caribbean basin, every part of its shores is grievously affected by frequent visitations of the chief of destroying agents. No portion of the earth's surface is so fortunate in every geographical feature as this beautiful sea. Girdled by the most fertile lands of the world, which in their varied surface afford many of the best features of temperate climates beneath a torrid sun, it would seem as if it were especially designed to rear great and varied peoples along its shores. The long crescent of islands which separates it from the broad waters of the Atlantic abounds in harbors to an extent quite unusual in tropical countries, and seems in every regard well fitted to be the cradle of a race of mariners. At its gates open the three great rivers of the Americas, the Mississippi, the Orinoco, and the Ama-

zon; through its waters lies the great natural highway from the peoples of the Atlantic to those of the lands which border on the Pacific Ocean. Yet all these advantages seem powerless to develop the races dwelling on its shores. Three centuries' existence has given some increase of numbers, but not one particle of advance; indeed, at many points the observer is forced to acknowledge that the Spanish colonists have sunk below the level occupied by their fathers. Despite the great natural advantages of the region they inhabit, they have become neither mariners nor merchants. Despite a climate which from all analogy we should judge favorable to the development of some intellectual brilliancy, if no great amount of intellectual force, there has not been a single name of any celebrity either in art or literature. Before we attribute the failure of the colonies of the Caribbean to peculiarities of race, or lay the whole blame upon the influences of climate, it is but just to consider whether the instability of the land may not have contributed to oppose the highest development in that region.

The western coast of South America, from the Isthmus of Panama to Patagonia, has been in a condition of almost incessant movement since the time of the Spanish settlement. The frightful convulsions of a few months ago, which by earthquake shocks and oceanic waves devastated nearly twelve hundred miles of this coast, sacrificing over fifty thousand lives, are still fresh in the public mind. Yet this terrible destruction of life and property has recurred so often within the past three centuries that it has ceased to be reckoned by the people as an accident out of the course of nature, and is looked upon as a phenomenon as much to be expected as a thunder-storm in other lands. Although only about three centuries have elapsed since our chronicles of the earthquakes on this shore began, they afford us an appalling list of convulsions which have in quick succession devastated a greater or less portion of

the states bordering on the Pacific. The first recorded shock occurred in 1570. It seems to have been extremely violent, although the limited extent of the Spanish settlements at that time made the observations very imperfect. We learn, however, that at St. Jago, in Chili, great landslips and falls of rock took place, and that a great earthquake wave rolled upon the land. Twelve years later Arequipa was almost ruined by the first of the many shocks from which it was to suffer in the succeeding centuries.

In 1586 another great shock ravaged the shore for a distance of six hundred miles, concentrating its force in the neighborhood of Lima; with this shock came a sea-wave fourteen fathoms high, which inundated the country for six miles from the shore. In 1600 there was an earthquake at Arequipa, succeeded by a great darkness and rain of ashes for twenty days. 1604, 1647, and 1657 brought great and destructive earthquakes, but there seems not to have been enough of an exceptional character to warrant especial mention. In 1697 Lima was again greatly damaged, and the next year the summit of the volcanic mountain of Carguarazo fell in during an earthquake, and a great torrent of mud and water which burst forth did much to complete the ruin begun by the shock. This torrent doubtless had its source in one of those crater lakes so common in most volcanic countries, the bounds of which were broken by the fall of the mountain. The towns of Hambato and Hacamunga were completely ruined by this shock. The years 1716 and 1720 brought devastating shocks in Peru and Ecuador, greatly damaging Lima and Arequipa. In 1736 the town of Hacamunga, rebuilt after the earthquake of 1697, was again laid in ruins. The territory suffered a still greater blow from the earthquake of October 28, 1746. The first shock was the most severe, but over two hundred occurred within the ensuing twenty-four hours. Lima and Callao were much injured by the earthquake, and the great wave,

over eighty feet high, which rolled in upon the shore, completed the destruction to the latter city, and brought ruin to four other harbors on the coast. During the same disturbance, four volcanoes in this part of the Andes poured forth torrents of water from their fissured sides. These floods came doubtless, as did that which escaped from the crater of Carguarazo in 1697, from the great cavities left by the retreating lava in the depths of the mountains.

The most destructive earthquake of the century, indeed one of the most calamitous shocks known to have visited any portion of the earth, was that which shook a large part of the Andean chain on the morning of the 4th of February, 1797. The region most affected lay within the territories of Peru and Ecuador; over a large part of both of these states the destruction was terrible. This shock is frequently mentioned in history as the earthquake of Riobamba, a city—one of many ruined by the shock—which owes its prominence, not so much to the greater severity of the earthquake there, as to the fact that the effects of the shock at that point were attentively examined by Humboldt when he visited the spot, a few years after the calamity. The observations of the illustrious traveller showed that the intensity of the movement was unparalleled in the history of earthquake shocks. Among other strange results, there is reason to believe that bodies of men were thrown through the air to the summit of a hill, one hundred feet above the level of the city, and several hundred feet distant therefrom. The shock was accompanied, or rather succeeded, by a terrible sound, which, however, was not heard over all the region affected. In the region of greatest disturbance every dwelling was overthrown, and many houses were buried beneath the masses which were shaken from the mountains. Over forty thousand people perished. Around Tunguragua the earth poured from fissures formed by the shock many great streams of water. Flames and suffocating vapors

burst forth from the surface of the lake of Quilotoa, in the region of Hacatunga, destroying the herds of cattle feeding on its banks. In 1819 Copiapo was ruined by a succession of shocks, which occurred between the 3d and the 11th of March. Again, in 1822 and 1826, much damage was done to the same city by severe shocks. The next general earthquake in the Andean region occurred on the 30th of May, 1827. The area of greatest disturbance was in and about Lima. The city was ruined, with great loss of life. The year afterwards, on the 30th of March, came another shock, throwing down most of the houses which had withstood the movement of the preceding year. Valparaiso and Santiago, in Chili, were visited by very severe shocks in October, 1829: much damage was done to life and property. On the 20th of February of the succeeding year, after one or two premonitory movements, there came three great shocks in quick succession, which overthrew the cities of Concepcion, Salacahuano, and Chillan, as well as many smaller towns. After this shock the shore line was found to be permanently elevated along several hundred miles of the coast. The uplift was from one to ten feet, but at some points a gradual subsidence reduced it one half. This shock, like most which have desolated this shore, seems to have originated some distance seaward of the shore line. This was indicated by the successive waves of vast height which rolled in upon the shore. Other evidences of the submarine origin of the shock were noticed. Two columns of thick smoke were observed to issue from the sea, and at the point where they came forth the water retained for some time a whirling motion, as if the waves were pouring into some great cavity. Another shock of almost equal intensity visited the same shore in 1837. Valdivia was ruined, and many other towns much damaged. The shore is said to have been strewn with uprooted trees, and the bottom of the sea among the islands of

the Chonos Archipelago was permanently raised more than eight feet. A whale-ship some miles off the coast was so violently shaken that she lost her masts. From that date to 1851, this part of the South American coast enjoyed a comparative immunity from earthquakes of destructive force. In 1851 Valparaiso had four hundred of its houses ruined. In 1859 Quito lost five thousand of its inhabitants, and immense damage was done to the city by a severe shock. The convulsions which have since shaken the southern continent are so well remembered as to require no description here.

Our glance over the history of the South American earthquakes has shown us that quite one half of the coast line of the continent is subject to earthquakes of the most destructive character. Those unfortunate countries include the fairest portion of the continent, — that which nature has favored the most with superb scenery, varied and generally healthful climate, and rich stores of mineral wealth. There seems not much to be hoped for the future there, at least until the disturbing forces sink to rest; for how can political stability, continuous effort, or any other result of an advanced civilization be expected, where the land is as treacherous as the sea, and the forces of nature seem man's natural enemies? If the younger of our twin continents is ever to bear great and prosperous peoples, it is to be feared that we must look for their development, not among the grand mountains on the north and west shores, or the richly endowed table-lands which lie on the flanks of these, but on the low ridges and vast plains of the eastern shore, where, though the inhabitants are exposed to the unmitigated heat of a torrid sun, they still have the first condition of prosperity assured to them in the stability of the soil beneath their feet. The forces which build up the continents have not ceased their work in South America: they seem to be more active there than on any other part of the earth's surface. Man has taken

possession of that land before the preparation for him was complete.

As we pass northward from the central portion of the western shore of South America, we find the intensity of the seismic energy steadily decreasing. The earthquake record of Mexico is much less extensive than that of any equally large portion of the Andean region. The first shock recorded by the settlers of Mexico was in 1542; all valuable details concerning it are wanting. In 1575 the district of San Salvador was visited by a disastrous shock. 1577, 1593, 1625, and 1656 brought destructive convulsions. We have no good descriptions of the phenomena connected with these earthquakes, so that it is not worth while to study them in detail. On the 24th of March, 1697, began that series of frequently recurring earthquakes of the greatest intensity which have so often desolated the region about Acapulco. Like most of the movements of succeeding years, this shock was accompanied by a loud subterranean sound like the firing of volleys of cannon, which added much to the terror produced by the convulsion. On the 14th of March, 1787, the city was the second time destroyed. There seems to have been also a great change in the level of the shore line, but we are not told whether or not it was permanent. In the September succeeding, the city of Mexico was much injured by an earthquake. Acapulco was once more shaken into ruins in 1799. The city of Mexico was again greatly damaged by an earthquake which occurred on the 6th of March, 1800. This earthquake is interesting inasmuch as it presented those peculiarities of movement which are commonly believed by the people of earthquake countries to indicate a rotary movement of the ground in the affected region. The shock of 1820, though not very severe at Acapulco, was nevertheless attended by a most extraordinary movement of the sea. The water at first retired slowly to a considerable distance from the land. After two hours it returned, not in a

great wave as is usually the case, but gradually, like a fast-coming tide, rising many feet above its previous level, — so high, indeed, as to cover a large part of the city. This movement was repeated two or three times before the sea returned to its original level. At the time of the next great shock, on the 6th of January, 1837, the city was completely ruined, but was spared the visitation of the sea-waves.

On the 20th of the same month the volcano of Cosiguina began an eruption, accompanied by a succession of violent shocks, which desolated the country for a distance of twenty leagues from the crater. There is probably no case on record where the destructive effect of shocks accompanying a volcanic eruption were more wide-spread and complete. Again in 1837, a severe and long-continued series of shocks was felt at Acapulco. Some accounts state that the vibrating movement continued for more than a month.

There seems to be even as little connection existing between the earthquakes of Mexico and those of the rest of North America as we have found to exist between the shocks which affect the Caribbean area and those of the northern part of our own continent. Only one or two of the Mexican disturbances have propagated their movements as far as the valley of the Mississippi.

The earthquake shocks of our own continent, though fortunately somewhat less numerous than those of the twin continent to the southward, are yet sufficient to enable us, in our observation of their distribution, to perceive three distinct areas of disturbance, each so clearly limited that we may say the shocks of each are from an independent source of movement. These areas correspond with the most general topographical divisions of the continent, — the valley of the Mississippi constituting one, and the others being to the east and west of the mountain chains which separate this basin from the sea borders. We have a number of shocks recorded from each of these areas, yet

it is doubtful whether, with a single exception, any of these disturbances has been felt outside of the area in which it originated.

We are as yet too ignorant of the history of the disturbances which may have taken place during the last century in the region known as British America, to determine whether it is to be regarded as a part of the Mississippi area, or whether its disturbances are limited to its own extent. The northern portion of the Pacific coast of our continent is almost equally unknown to us. A number of observations on the earthquakes of Alaska render it probable that that region either constitutes an independent area or participates in the movements of the neighboring Asiatic shore. The region to the southward, between Alaska and the United States, is so little known to us that we can only conjecture that it is likely to participate in the movements which affect the shores farther to the south.

The general correlation of the seats of the greatest seismic energy on the continent of North America is quite peculiar. At each corner of the great triangle which the continent forms, — in Central America, Alaska, and Iceland, — we have a limited region where everything betokens great activity of those forces which, operating beneath the crust, are manifested at the surface by earthquake shocks and volcanic eruptions. Over the remainder of the surface of North America we have no indications of existing volcanic activity, the only manifestations of internal force being in the shape of earthquake shocks. There can be no doubt that at a time geologically recent, — during

the later part of the tertiary period, — the Pacific coast and a large part of the Rocky Mountain region was the seat of volcanic and probably of earthquake energy much more intense than now exists in the continuation of these mountains on the southern continent. The most extensive areas of volcanic rock known to exist on the surface of the earth are to be found in Oregon and the mountains to the southward of that State. The volcanic district of the Columbia River is as large as the Empire of France; and over its whole area are scattered, to the depth of many hundred feet, the products of the great convulsions which in this as in many other regions of volcanic activity occurred at the close of the last geological period. Earthquakes leave no such enduring evidences of their action as volcanic eruptions, so that we cannot prove that during the period of disturbance this companion force of volcanic energy was very intense in its action; but from what we know of the relation of the two manifestations of internal activity, there can be little doubt that this was also a period of frequent and violent earthquakes.

It seems by no means impossible that man may have been a witness to those prodigious manifestations of seismic force, far transcending any effects of internal activity which have been seen by historic peoples. If the remains of the prehistoric man from California, now in the hands of Professor J. D. Whitney, be really from the bed where they are said to have been found, then our race was certainly represented on that portion of the Pacific shore long before those great convulsions occurred.

AN AUGUST PASTORAL.

I.

DEAD is the air, and still! the leaves of the locust and walnut
Lazily hang from the boughs, inlaying their intricate outlines
Rather on space than the sky,—on a tideless expansion of slumber.
Faintly afar in the depths of the duskily withering grasses
Katydid chirp, and I hear the monotonous rattle of crickets.
Dead is the air, and ah! the breath that was wont to refresh me
Out of the volumes I love, the heartfelt, whispering pages,
Dies on the type, and I see but wearisome characters only.
Therefore be still, thou yearning voice from the garden in Jena,—
Still, thou answering voice from the park-side cottage in Weimar,—
Still, sentimental echo from chambers of office in Dresden,—
Ye, and the feebler and farther voices that sound in the pauses!
Each and all to the shelves I return; for vain is your commerce
Now, when the world and the brain are numb in the torpor of August.

II.

Over the tasselled corn, and fields of the twice-blossomed clover,
Dimly the hills recede in the reek of the colorless hazes:
Dull and lustreless, now, the burnished green of the woodlands;
Leaves of blackberry briars are bronzed and besprinkled with copper;
Weeds in the unmown meadows are blossoming purple and yellow,
Roughly entwined, a wreath for the tan and wrinkles of Summer.
Where shall I turn? What path attracts the indifferent footstep,
Eager no more as in June, nor lifted with wings as in May-time?
Whitherward look for a goal, when buds have exhausted their promise,
Harvests are reaped, and grapes and berries are waiting for Autumn?
Wander, my feet, as ye list! I am careless, to-day, to direct you;
Take, here, the path by the pines, the russet carpet of needles
Stretching from wood to wood, and hidden from sight by the orchard!
Here, in the sedge of the slope, the centuary, pink as a sea-shell,
Opens her stars all at once, and with finer than tropical spices
Sweetens the barren aridity,—censer of fields that are sterile.
Now, from the height of the grove, between the irregular tree-trunks,
Over the falling fields and the meadowy curves of the valley,
Glimmer the peaceful farms, the mossy roofs of the houses,
Gables gray of the neighboring barns, and gleams of the highway
Climbing the ridges beyond to dip in the dream of a forest.

III.

Ah, forsaking the shade, and slowly crushing the stubble,
Parting the viscous roseate stems and the keen pennyroyal,
Rises a different scene, suggestion of heat and of stillness,—
Heat as intense and stillness as dumb, the immaculate ether's
Hush when it vaults the waveless Mediterranean sea-floor;
Golden the hills of Cos, with pencilled cerulean shadows;
Phantoms of Carian shores that are painted and fade in the distance;

Patmos behind, and westward the flushed Ariadnean Naxos,—
 Once as I saw them sleeping, drugged by the poppy of Summer.
 There, indeed, was the air, as with floating stars of the thistle
 Filled with impalpable forms, regrets, possibilities, longings,
 Beauty that was and was not, and Life that was rhythmic and joyous,
 So that the sun-baked clay the peasant took for his wine-jars
 Brighter than gold I thought, and the red acidity nectar.
 Here, at my feet, the clay is clay and a nuisance the stubble,
 Flaring St.-John's-wort, milk-weed, and coarse, unpoetical mullein;—
 Yet, were it not for the poets, say, is the asphodel fairer?
 Were not the mullein as dear, had Theocritus sung it, or Bion?
 Yea, but they did not; and we, whose fancy's tenderest tendrils
 Shoot unsupported, and wither, for want of a Past we can cling to,
 We, so starved in the Present, so weary of singing the Future,—
 What is 't to us, if, haply, a score of centuries later,
 Milk-weed inspires Patagonian tourists, and mulleins are classic?

IV.

Idly balancing fortunes, feeling the spite of them, maybe,—
 For the little withheld outweighs the much that is given,—
 Feeling the pang of the brain, the endless, unquenchable yearning
 Born of the knowledge of Beauty, not to be shared or imparted,
 Slowly I stray, and drop by degrees to the thickets of alder
 Fringing a couch of the stream, a basin of watery slumber.
 Broken, it seems; for the splash and the drip and the bubbles betoken
 What?—the bath of a nymph, the bashful strife of a Hylas?
 Broad is the back, and bent from an un-Olympian stooping,
 Narrow the loins and firm, the white of the thighs and shoulders
 Changing to reddest and toughest of tan at the knees and the elbows.
 Is it a faun? He sees me, nor cares to hide in the thickets.
 Faun of the bog is he, a sylvan creature of Galway
 Come from the ditch below, to cleanse him of sweat and of muck-stain;
 Willing to give me speech, as, naked, he stands in the shallows.
 Something of coarse, uncouth, barbaric, he leaves on the bank there;
 Something of primitive human fairness cometh to clothe him.
 Were he not bent with the pick, but straightened from reaching the bunches
 Hung from the mulberry branches,—heard he the bacchanal cymbals,
 Took from the sun an even gold on the web of his muscles,
 Knew the bloom of his stunted bud of delight of the senses,—
 Then as faun or shepherd he might have been welcome in marble.
 Yea, but he is not; and I, requiring the beautiful balance,
 Music of life in the body, and limbs too fair to be hidden,
 Find, indeed, some delicate colors and possible graces,—
 Moral hints of the man beneath the unsavory garments,—
 Find them, and sigh, lamenting the law reversed of the races
 Starting the world afresh on the basis unlovely of Labor.

V.

Was it a spite of fate that blew me hither, an exile,
 Still unweaned, and not to be weaned, from the milk I was born to?
 Bitter the stranger's bread to the homesick, hungering palate;
 Bitterer still to the soul the taste of the food that is foreign!

Yet must I take it, yet live, and somehow seem to be healthy,
 Lest my neighbors, perchance, be shocked by an uncomprehended
 Violent clamor for that which I crave and they cannot supply me, —
 Hunger unmeet for the times, anachronistical passions, —
 Beauty seeming distorted because the rule is distortion.
 Here is a tangle which, now, too idle am I to unravel,
 Snared, moreover, by bitter-sweet, moon-seed, and riotous fox-grape,
 Meshing the thickets: *procul, O procul*, unpractical fancies!
 Verily, thus bewildering myself in the maze of æsthetic,
 Solveless problems, the feet were wellnigh heedlessly fettered.
 Thoughtless, 't is true, I relinquished my books; but *crescit eundo*
 Wisely was said, — for desperate vacancy prompted the ramble,
 Memories prolonged, and a phantom of logic urges it onward.

VI.

Here are the fields again! The soldierly maize in tassel
 Stands on review, and carries the scabbarded ears in its arm-pits.
 Rustling I part the ranks, — the close, engulfing battalions
 Shaking their plumes overhead, — and, wholly bewildered and heated,
 Gain the top of the ridge, where stands, colossal, the pin-oak.
 Yonder, a mile away, I see the roofs of the village, —
 See the crouching front of the meeting-house of the Quakers,
 Oddly conjoined with the whittled Presbyterian steeple.
 Right and left are the homes of the slow, conservative farmers,
 Loyal people and true, but, now that the battles are over,
 Zealous for Temperance, Peace, and the Right of Suffrage for Women.
 Orderly, moral, are they, — at least, in the sense of suppression;
 Given to preaching of rules, inflexible outlines of duty;
 Seeing the sternness of life, but, alas! overlooking its graces.
 Let me be juster: the scattered seeds of the graces are planted
 Widely apart; but the trumpet-vine on the porch is a token;
 Yea, and awake and alive are the forces of love and affection,
 Plastic forces that work from the tenderer models of beauty.
 Who shall dare to speak of the possible? Who shall encounter
 Pity and wrath and reproach, recalling the record immortal
 Left by the races when Beauty was law and Joy was religion?
 Who to the Duty in drab shall bring the garlanded Pleasure? —
 Break with the chant of the gods, the gladsome timbrels of morning, —
 Nasal, monotonous chorals, sung by the sad congregation?
 Better it were to sleep with the owl, to house with the hornet,
 Than to conflict with the satisfied moral sense of the people.

VII.

Nay, but let me be just; nor speak with the alien language
 Born of my blood; for I know them, and value and love them.
 Was it my fault, if a strain of the distant and dead generations
 Brake in my being, renewed, and made me other than these are?
 Purer, perhaps, their habit of law than the freedom they shrink from;
 So, restricted by will, a little indulgence is riot.
 They, content with the glow of a carefully tempered twilight,
 Measured pulses of joy, and colorless growth of the senses,
 Stand aghast at my dream of the sun, and the sound, and the splendor!

Mine it is, and remains, resenting the threat of suppression,
Stubbornly shaping my life, and feeding with fragments its hunger.
Drifted from Attican hills to stray on a Scythian level,
So unto me it appears,—unto them a perversion and scandal.

VIII.

Lo! in the vapors, the sun, colossal and crimson and beamless,
Touches the woodland; fingers of air prepare for the dew-fall.
Life is fresher and sweeter, insensibly toning to softness
Needs and desires that are but the brodered hem of its mantle,
Not the texture of daily use; and the soul of the landscape,
Breathing of justified rest, of peace developed by patience,
Lures me to feel the exquisite senses that come from denial,
Sharper passion of Beauty never fulfilled in external
Forms or conditions, but always a fugitive has-been or may-be.
Bright and alive as a want, incarnate it dozes and fattens.
Thus, in aspiring, I reach what were lost in the idle possession;
Helped by the laws I resist, the forces that daily depress me;
Bearing in secreter joy a luminous life in my bosom,
Fair as the stars on Cos, the moon on the bosage of Naxos!
Thus the skeleton Hours are clothed with rosier bodies:
Thus the buried Bacchanals rise unto lustier dances:
Thus the neglected god returns to the desolate temple:
Beauty, thus rethroned, accepts and blesses her children!

PENNSYLVANIA DUTCH.

I HAVE lived for twenty years in the county of Lancaster, where my neighbors on all sides are Pennsylvania Dutch. In the following pages, I shall try to give, from my own observation and familiar acquaintance, some account of the life of a people who are almost unknown outside of the rural neighborhoods of their own State, who have much that is peculiar in their language, customs, and beliefs, and whom I have learned heartily to esteem for their native good sense, friendly feeling, and religious character.

Language.

The tongue which these people speak is not German, nor do they expect you to call it so. They and it are "Dutch." For the native German who works with them on the farm they entertain some

contempt, and the title "Yankee" is with them a synonyme for cheat. As must always be the case where the great majority do not read the tongue which they speak, and live in contact with those who speak another, the language has become mixed and corrupt. Seeing a young neighbor cleaning a buggy, I tried to talk with him by speaking German. "Willst du reiten?" said I (not remembering that *reiten* is to ride on horseback). "Willst du reiten?" All my efforts were vain. I was going for cider to the house of an apple-growing Dutchman, and there I asked his daughter what she would say, under the circumstances, for "Are you going to ride?" "Widdu forry? Buggy forry?" was the answer. (Willst du fahren?) Such expressions are heard as "Kooockamultó" for "Guck einmal

da," or "Just look at that!" and "Hal-tybissel," for "Halt ein bischen," or "Wait a little bit." "Gutenobit" is always used for "Guten Abend." I once asked a woman what pie-crust is in Dutch. "Py-kroosht," she answered.

Those who speak English use such uncommon expressions as,— "That's a werry *lasty* basket" (meaning durable); "I seen him yet a'ready"; "I knew a woman that had a good baby *wunst*"; "The bread is all" (all gone). I have heard the carpenter call his plane *she*, and a housekeeper apply the same pronoun to her home-made soap.

A rich landed proprietor is sometimes called *king*. An old Dutchman who was absent from home thus narrated the cause of his journey: "I must go and see old Yoke (Jacob) Beidelman. Te people calls me te kink ov te manor (township), and tay calls him te kink ov te Octorara. Now dese kinks must come togeder once." (Accent *together*, and pass quickly over *once*.)

Religion.

I called recently on my friend and neighbor, Peter S—, who is a thrifty farmer, of a good mind, and a member of the old Mennist or Mennonite Society. I once accompanied him and his pleasant wife to their religious meeting. The meeting-house is a low brick building, with neat surroundings, and resembles a Friends' meeting-house. The Mennists in many outward circumstances very much resemble the Society of Friends, but do not, like the latter, hold that the object of extreme veneration is the teaching of the Holy Spirit in the secret stillness of the soul.

In the interior of the Mennist meeting, a Quaker-like plainness prevails. The men, with broad-brimmed hats and simple dress, sit on benches on one side of the house, and the women, in plain caps and black sun-bonnets, are ranged on the other. The services are almost always conducted in Dutch, and consist of exhortation and prayer, and

singing by the congregation. The singing is without previous training, and is not musical. A pause of about five minutes is allowed for private prayer.

The preachers are not paid, and are chosen in the following manner. When a vacancy occurs, and a new appointment is required, one of the members goes into a small room, appointed for the purpose; and to him, waiting, enter singly the men and women, as many as choose, who tell him the name of the person whom each prefers would fill the vacancy. After this, an opportunity is given to any candidate to excuse himself from the service. Those who are not excused, if, for instance, six in number, are brought before six books. Each candidate takes up a book, and the one within whose book a lot is found, is the chosen minister.

I asked my friends, who gave me some of these details, whether it was claimed or believed that there is any especial guidance of the Divine Spirit in thus choosing a minister. From the reply, I did not learn that any such guidance is claimed, though they spoke of a man who *was led* to pass his hand over all the other books, and who selected the last one, but he did not get the lot after all. He was thought to be ambitious of a place in the ministry.

The three prominent sects of Mennonites all claim to be Non-Resistants, or *wehrlos*. The old Mennists, who are the most numerous and least rigid, vote at elections, and are allowed to hold such public offices as school director and road supervisor, but not to be members of the Legislature. The ministers are expected not to vote. The members of this society cannot bring suit against any one; they can hold mortgages, but not judgment bonds. Like Quakers, they were not allowed to hold slaves, and they do not take oaths, nor deal in spirituous liquors.

My neighbor Peter and I were once talking of the general use of the word "Yankee" to denote one who is rather unfair in his dealings. They sometimes speak of a "Dutch Yan-

kee"; and Peter asked me whether, if going to sell a horse, I should tell the buyer every fault that I knew of the horse's having, as, he maintained, was the proper course. His brother-in-law, who was at times a horse-dealer, did not agree with him.

Titles do not abound among these plain neighbors of ours. Peter's little son used to call him "Pete," as he heard the hired men do. Nevertheless, one of our New Mennist acquaintances was quite courtly in his address. This last-mentioned sect branched off some forty years ago, and claim to be *reformirt*, or to have returned to an older and more excellent standard. They do not vote at all. Their most striking peculiarity is this: if one of the members is disowned by the church, the other members of his own family who are members of the meeting are not allowed to eat at the same table with him, and his wife withdraws from him. A woman who worked in such a family told me how unpleasant it was to her to see that the father did not take his seat at the table, to which she was invited.

In support of this practice, they refer to the eleventh verse of the fifth chapter of First Corinthians: "But now I have written unto you not to keep company, if any man that is called a brother be a fornicator, or covetous, or an idolater, or a railer, or a drunkard, or an extortioner, with such an one *not to eat*." We have yet another sect among us, called Amish (pronounced Ommish). In former times these Mennists were sometimes known as "beardy men," but of late years the beard is not a distinguishing trait. It is said that a person once asked an Amish man the difference between themselves and another Mennist sect. "Vy, dey vears puttons, and ve veارش hooks oont eyes"; and this is, in fact, a prime difference. All the Mennist sects retain the ordinances of baptism and the Lord's Supper, but some also practise feed-washing, and some sectarians "greet one another with a holy kiss."

On a Sunday morning Amish wag-

ons, covered with yellow oil-cloth, may be seen moving toward the house of that member whose turn it is to have the meeting. Great have been the preparations there beforehand,—the whitewashing, the scrubbing, the polishing of tin and brass. Wooden benches and other seats are provided for the "meeting-folks," and the services resemble those already described. Of course, young mothers do not stay at home, but bring their infants with them. When the meeting is over, the congregation remain to dinner. Bean soup was formerly the principal dish on this occasion, but, with the progress of luxury, the farmers of a fat soil no longer confine themselves to so simple a diet. Imagine what a time of social intercourse this must be, transcending those hospitable gatherings, the quarterly meetings of Friends. I have heard that, after meeting is over, the Amish people are all seen going to that store which gives the highest price for butter and eggs,—for they have compared notes.

The Amish dress is peculiar; and the children are diminutive men and women. The women wear sun-bonnets and closely fitting dresses, but often their figures look very trim, in brown, with green or other bright handkerchiefs meeting over the breast.

I saw a group of Amish at the railroad station the other day,—men, women, and a little boy. One of the young women wore a pasteboard sun-bonnet covered with black, and tied with narrow blue ribbon, among which showed the thick white strings of her Amish cap; a gray shawl, without fringe; a brown stuff dress, and a purple apron. One middle-aged man, inclined to corpulence, had coarse, brown woollen clothes, and his pantaloons, without suspenders (in the Amish fashion), were unwilling to meet his waistcoat, and showed one or two inches of white shirt. No buttons were on his coat behind, but down the front were hooks and eyes. One young girl wore a bright brown sun-bonnet, a green dress, and a light-blue apron. The choicest figure, however,

was the six-year-old, in a jacket, and with pantaloons plentifully plaited into the waistband behind; hair cut straight over the forehead, and hanging to the shoulders; and a round-crowned black wool hat, with an astoundingly wide brim. The little girls, down to two years old, wear the plain cap, and the handkerchief crossed upon the breast.

In Amish houses, the love of ornament appears in brightly scoured utensils,—how the brass ladles shine!—and in embroidered towels, one end of the towel showing a quantity of work in colored cottons. When steel or elliptic springs were introduced, so great a novelty was not at first patronized by members of the meeting; but an infirm brother, desiring to visit his friends, directed the blacksmith to put a spring inside his wagon, under the seat, and since that time steel springs have become common. I have even seen a youth with flowing hair (as is common among the Mennists), and two trim-bodied damsels, riding in a very plain, uncovered buggy.

Gideon K—, too, rode in a common buggy; but he was a great backslider; poor man, he speculated, and committed suicide!

It was an Amish man, not well versed in the English language, from whom I bought poultry, and who sent me a bill for "chighans."

In mentioning these ludicrous circumstances, far be it from me to ignore the virtues of these unpretending people.

History of the Sect.

It appears that this sect is named from Simon Menno, a reformer, who died in 1561, though it is doubtful whether Menno founded the sect. "The prevailing opinion among church historians, especially those of Holland, is that the origin of the Dutch Baptists may be traced to the Waldenses, and that Menno merely organized the concealed and scattered congregations as a denomination."*

The freedom of religious opinion which was allowed in Pennsylvania

may have had the effect of drawing hither the Continental Europeans, who established themselves in the fertile lands of the western part of the county of Chester, now Lancaster. It was not until the revolution of 1848 that the different German states granted full civil rights to the Mennonites. In some cases this freedom has since been withdrawn. Hanover in 1858 annulled the election of a representative to the second chamber, because he was a Mennonite. Much of this opposition probably is caused by the sect's refusing to take oaths.

Under those opposing circumstances in the Old World, it is not remarkable that the number of Mennonites in the United States is reported to exceed that in all the rest of the world put together. The Amish are named from Jacob Amen, a Swiss Mennonite preacher of the seventeenth century.

As I understand the Mennonites, they endeavor in church government literally to carry out the injunction of Jesus, "Moreover, if thy brother shall trespass against thee, go and tell him his fault between thee and him alone; if he shall hear thee, thou hast gained thy brother. But if he will not hear thee, then take with thee one or two more, that in the mouth of two or three witnesses every word may be established. And if he shall neglect to hear them, tell it unto the church; but if he neglect to hear the church, let him be unto thee as a heathen man and a publican."

Besides these sectaries, we have among us a few of the Dunkers (German *tunken*, to dip), from whom sprang the Seventh-Day Baptists of Ephratah, with their Brother and Sister houses of Celibates.

"So lang der Ephratah wird stehen
Als Jungfrau'n da in Reihen gehen."

Also at Litz we have the Moravian Church and Gottesacker, and a Moravian Church at Lancaster. Here, according to custom, a love-feast was held recently, when a cup of coffee and a rusk (sweet biscuit) were handed to each person present.

* American Cyclopædia.

Politics.

As our county was represented in Congress by Thaddeus Stevens, you have some idea of what our politics are. We have returned about five or six thousand majority for the Whig, Anti-Masonic, and Republican ticket, and the adjoining *very* Dutch county of Berks invariably as great a majority for the Democratic. So striking a difference has furnished much ground for speculation. The Hon. Mr. S—— says that Berks is Democratic because so many Hessians settled there after the Revolution. "No," says the Hon. Mr. B—— "I attribute it to the fact that the people are not taught by unpaid ministers as with us, but are Lutherans and German Reformed, and can be led by their preachers. "Why is Berks Democratic?" I asked our Democratic postmaster. "I do not know," said he; "but the people there are ignorant, they do not read a paper on the other side." A former postmaster tells me that he has heard that the people of Berks were greatly in favor of liberty in the time of the elder Adams; that they put up liberty-poles, and Adams sent soldiers among them and had the liberty-poles cut down; and "ever since they have been opposed to that political party, under its different names."

Festivals.

The greatest festive occasion, or the one which calls the greatest number of persons to eat and drink together, is the funeral.

My friends, Peter and Matty S——, have that active benevolence and correct principle which prompt care for the sick and dying, and kind offices toward the mourner. Nor are they alone in this. When a death occurs, our Dutch neighbors enter the house, and, taking possession, relieve the family as far as possible from the labors and cares of a funeral. Some "redd up" the house, making that which was neglected during the sad trials of a fatal disease fit again for the reception of company. Others visit the kitchen,

and help to bake great store of bread, pies, and rusks for the expected gathering. Two young men and two young women generally sit up together overnight to watch in a room adjoining that of the dead.

At funerals occurring on Sunday, three hundred carriages have been seen in attendance; and so great at all times is the concourse of people of all stations and all shades of belief, and so many partake of the entertainment liberally provided, that I may be excused for calling funerals the great festivals of the Dutch. Weddings are also highly festive occasions, but they are confined to the "Freundschaft," and to much smaller numbers.

The services at funerals are generally conducted in the German language. The preachers must necessarily be able to read German, as the hymns and Scriptures are printed therein.

An invitation is extended to the persons present to return to eat after the funeral, or the meal is provided before leaving for the graveyard. Hospitality, in all rural districts, where the guests come from afar, seems to require this. The tables are sometimes set in a barn, or large wagon-house, and relays of guests succeed one another, until all are done. The neighbors wait upon the table. The entertainment generally consists of meat, frequently cold; bread and butter; pickles or sauces, such as apple-butter; pies and rusks; sometimes stewed chickens, mashed potatoes, cheese, etc., and coffee invariably. All depart after the dish-washing, and the family is left in quiet again.

I have said that persons of all shades of belief attend funerals; but our New Mennists are not permitted to listen to the sermons of other denominations. Memorial stones over the dead are more conspicuous than among Friends. But they are still quite plain, with simple inscriptions. Occasionally family graveyards are seen. One on a farm adjoining ours seems cut out of the side of a field. It stands back from the high-road, and access to it is on foot. To

those who are anxious to preserve the remains of their relatives, these graveyards are objectionable, as they will probably be obliterated after the property has passed into another family.

Weddings.

Our farmer had a daughter married lately, and I was invited to see the bride leave home. The groom, in accordance with the early habits of the Dutch folks, reached the bride's house about six, A. M., having previously breakfasted and ridden four miles. As he probably fed and harnessed his horse, besides attiring himself for the grand occasion, he must have been up betimes of an October morning.

The bride wore purple mousseline-de-laine and a blue bonnet. As some of the "wedding-folks" were dilatory, the bride and groom did not get off before seven. The bridegroom was a mechanic, and seemed to be a steady man. The whole party was composed of four couples, who rode into Lancaster in buggies, where two pairs were married by a minister. In the afternoon, the newly-married couples went down to Philadelphia for a few days, and on the evening of their return we had a reception, or home-coming. Supper consisted of roast turkeys, beef, and stewed chickens, cakes, pies, and coffee of course. We had raisin-pie, which is a great treat in Dutchland on festive or solemn occasions. "Nine couples" of the bridal party sat down to supper, and then the remaining spare seats were occupied by the landlord's wife, the bride's uncle, etc. We had a fiddler in the evening. He and the dancing would not have been there, had the household "belonged to meeting," and, as it was, some young Methodist girls did not dance.

One of my "English" acquaintances was sitting alone on a Sunday evening, when she heard a rap at the door, and a young Dutchman, an entire stranger, walked in and sat down, "and there he sat, and sat, and sat." Mrs. G— waited to hear his errand, politely making conversation; and finally he asked

whether her daughter was at home. "Which one?" He did not know. But that did not make much difference, as neither was at home. Mrs. G— afterwards mentioned the circumstance to a worthy Dutch neighbor, expressing surprise that a young man should call who had not been introduced. "How then *would* they get acquainted?" said he. She suggested that she did not think that her daughter knew the young man. "She would not tell you, perhaps, if she did." The daughter, however, when asked, seemed entirely ignorant of the young man, and did not know that she had ever seen him. He had probably seen her at the railroad station, and had found out her name and residence. It would seem to indicate much confidence on the part of parents, if, when acquaintances are formed in such a manner, the father and mother retire at nine o'clock, and leave their young daughter thus to "keep company," until midnight or later. It is no wonder that one of our German sects has declared against the popular manner of "courting."

I recently attended a New Mennist wedding, which took place in the frame meeting-house. We entered through an adjoining brick dwelling, one room of which served as an ante-room, where the "sisters" left their bonnets and shawls. I was late, for the services had begun about nine, on a bitter Sunday morning of December. The meeting-house was crowded, and in front on the left was a plain of book-muslin caps on the heads of the sisters. On shelves and pegs, along the other side, were placed the hats and overcoats of the brethren. The building was extremely plain, — whitewashed without, entirely unpainted within, with whitewashed walls. The preacher stood at a small, unpainted desk, and before it was a small table, convenient for the old men "to sit at, and lay their books on." Two stoves, a half-dozen hanging tin candlesticks, and the benches, completed the furniture. The preacher was speaking extemporaneously in English, for in this meeting-house the services

are often performed in this tongue ; and he spoke readily and well, though he now and then used such expressions as, "It would be wishful for men to do their duty"; "Man cannot separate them together"; and "This, Christ done for us."

He spoke at length upon divorce, which, he said, could not take place between Christians. The preacher spoke especially upon the duty of the wife to submit to the husband, whenever differences of sentiment arose ; of the duty of the husband to love the wife, and to show his love by his readiness to assist her. He alluded to Paul's saying that it is better to be unmarried than married, and he did not scruple to use plain language touching adultery. His discourse ended, he called upon the pair proposing marriage to come forward ; whereupon the man and woman rose from the body of the congregation on either side, and, coming out to the middle aisle, stood together before the minister. They had both passed their early youth, but had very good faces. The bride wore a mode-colored alpaca, and a black apron ; also a clear-starched cap without a border, after the fashion of the sect. The groom wore a dark green coat, cut "shad-bellied," after the manner of the brethren.

This was probably the manner of their acquaintance : — If, in spite of Paul's encouragement to a single life, a brother sees a sister whom he wishes to marry, he mentions the fact to a minister, who tells it to the sister. If she agrees in sentiment, the acquaintance continues for a year, during which private interviews can be had, if desired ; but this sect entirely discourages courting as usually practised among the Dutch.

The year having in this case elapsed, and the pair having now met before the preacher, he propounded to them three questions : —

1. I ask of this brother, as the bridegroom, do you believe that this sister in the faith is allotted to you by God as your helpmeet and spouse ? And I

ask of you, as the bride, do you believe that this, your brother, is allotted to you by God as your husband and head ?

2. Are you free in your affections from all others, and have you them centred alone upon this your brother or sister ?

3. Do you receive this person as your lawfully wedded husband [wife], do you promise to be faithful to him [her], to reverence him [to love her], and that nothing but death shall separate you ; that, by the help of God, you will, to the best of your ability, fulfil all the duties which God has enjoined on believing husbands and wives ?

In answering this last question, I observed the bride to lift her eyes to the preacher's face, as if in fearless trust. Then the preacher, directing them to join hands, pronounced them man and wife, and invoked a blessing upon them. This was followed by a short prayer, after which the wedded pair separated, each again taking a place among the congregation. The occasion was solemn. On resuming his place in the desk, the preacher's eyes were seen to be suffused, and pocket-handkerchiefs were visible on either side (the sisters' white, those of the brethren of colored silk). The audience then knelt, while the preacher prayed, and I heard responses like those of the Methodists, but more subdued. The preacher then made a few remarks to the effect that, although it would be grievous to break the bond now uniting these two, it would be infinitely more grievous to break the tie which unites us to Christ ; and then a quaint hymn was sung to a familiar tune. The "Church" does not allow wedding-parties, but a few friends may gather at the house after meeting.

Quiltings.

Some ten years ago there came to our neighborhood a pleasant, industrious "Aunt Sally," a mulatto ; and the other day she had a quilting, for she had long wished to re-cover two quilts. The first who arrived at Aunt Sally's

was our neighbor from over the "creek," or mill-stream, Nancy K—, in her black silk, and Mennist bonnet, formed like a sun-bonnet; and at ten came my dear friend Matty S—, who is tall and fat, and very pleasant;

"Whose heart has a lock southward, and is open
To the great noon of nature."

Her name is Magdalena, but we always call her Matty. Aunt Sally had her quilt up in her landlord's east room, for her own house was too small. However, at about eleven, she called us over to dinner; for people who have breakfasted at five or six have an appetite at eleven.

We found on the table beefsteaks, boiled pork, sweet potatoes, cole-slaw, pickled tomatoes, cucumbers, and *red* beets (thus the Dutch accent lies), apple-butter and preserved peaches, pumpkin and apple pie, sponge-cake and coffee.

After dinner came our next neighbors, "the maids," Katy and Mary Groff, who live in single blessedness and great neatness. They wore pretty clear-starched Mennist caps, very plain. Katy is a sweet-looking woman; and although she is more than sixty years old, her forehead is almost unwrinkled, and her fine fair hair is still brown. It was late when the farmer's wife came, — three o'clock; for she had been to Lancaster. She wore hoops, and was of the "world's people." Those women all spoke Dutch; for the maidens, whose ancestors came here one hundred and twenty years ago, do not speak English with fluency yet.

The first subject of conversation was the fall house-cleaning, and I heard mention of "die carpets hinaus an der fence," and "die fenshter und die porch"; and the exclamation, "My goodness, es war schlimm." I quilted faster than Katy Groff, who showed me her hands, and said, "You have not been corn-husking, as I have."

So we quilted and rolled, talked and laughed, got one quilt done, and put in another. The work was not fine; we laid it out by chalking around a small plate. Aunt Sally's desire was rather

to get her quilting done on this great occasion, than for us to put in a quantity of work.

About five o'clock we were called to supper. I need not tell you all the particulars of this plentiful meal. But the stewed chicken was tender, and we had coffee again.

Nancy K—'s husband now came over the creek in the boat, to take her home, and he warned her against the evening dampness. The rest of us quilted awhile by candle and lamp, and got the second quilt done at about seven.

At this quilting there was little gossip, and less scandal. I displayed my new alpaca, and my dyed merino, and the Philadelphia bonnet which exposes the back of my head to the wintry blast. Nancy K—, for her part, preferred a black silk sun-bonnet; and so we parted, with mutual invitations to visit.

Farming.

In this fertile limestone district, farming is very laborious, being entirely by tillage. Our regular routine is once in five years to plough the sod ground for corn. In the next ensuing year the same ground is sowed with oats; and when the oats come off in August, the industrious Dutchmen immediately manure the stubble-land for wheat. I have seen them laying down the black heaps when, in August, I have ridden some twelve or fourteen miles down to the hill-country in search of blackberries.

After the ground is carefully prepared, wheat and timothy (grass) seed are put in with a drill, and in the ensuing spring clover is sowed upon the same ground. By July, when the wheat is taken off the ground, the clover and timothy are growing, and will be ready to mow in the next, or fourth summer. In the fifth, the same grass constitutes a grazing ground, and then the sod is ready to be broken up again for Indian corn. Potatoes are seldom planted here in great quantities; a part of one of the oat-fields or corn-fields can be put into potatoes, and the ground will

be ready by fall to be put into wheat, if it is desired. A successful farmer put more than half of his forty acres into wheat; this being considered the best crop. The average crop of wheat is about twenty bushels, of Indian corn about forty.

I have heard of one hundred bushels of corn in the Pequea valley, but this is very rare. When the wheat and oats are in the barn or stack, enormous eight-horse threshers, whose owners go about the neighborhood from farm to farm, thresh the crop in two or three days; and thus what was once a great job for winter may all be finished by the first of October.

Peter S—— is a model farmer. His buildings and fences are in good order, and his cattle well kept. He is a little past the prime of life; his beautiful head of black hair being touched with silver. His wife is dimpled and smiling, and her two hundred and twenty pounds do not prevent her being active, energetic, forehanded, and "thorough-going." During the winter months the two sons go to the public school, — the older one with reluctance; there they learn to read and write, and "cipher" a little, and possibly study geography; they speak English at school, and Dutch at home. Much education the Dutch farmer fears, as productive of laziness; and laziness is a mortal sin here. The S——s rarely buy a book. The winter is employed partly in preparing material to fertilize the wheat-land during the coming summer. Great droves of cattle and sheep come down our road from the West, and our farmers buy from these, and fatten stock during the winter months for the Philadelphia market.

A proper care of his stock will occupy some portion of the farmer's time. Then he has generally a great "Freundschaft," or family connection, both his and his wife's; and the paying visits within a range of twenty or thirty miles, and receiving visits in return, help to pass away the time. Then Peter and Matty are actively benevolent; they are liable to be called upon,

summer and winter, to wait on the sick, and to help bury the dead. Matty was formerly renowned as a baker at funerals, where her services were always freely given.

This rich level land of ours is highly prized by the Dutch for farming purposes, and the great demand has enhanced the price. The farms, too, are small, seventy acres being a fair size. When Adam R——, the rich preacher, bought his last farm from an "Englishman," William G—— said to him: "Well, Adam, it seems as if you Dutch folks had determined to root us English out, but thee had to pay pretty dear for thy root this time."

There are some superstitious ideas that still hold sway here, regarding the growth of plants. A young girl coming to us for cabbage-plants said that it was a good time to set them out, for "it was in the Wirgin." It is very doubtful whether she knew *what* was in Virgo, but I suppose that it was the moon. So our farmer's wife tells me that the Virgin will do very well for cabbages, but not for any flowering plant like beans, for though they will bloom well, they will not mature the fruit. Grain should be sowed in the increase of the moon; meat butchered in the decrease will shrink in the pot.

Farmers' Wives.

One of my Dutch neighbors, who, from a shoemaker, became the owner of two farms, said to me, "The woman is more than half"; and his own very laborious wife had indeed been so.

The woman (in popular parlance, "the old woman") milks, raises the poultry, has charge of the garden, — sometimes digging the ground herself, and planting and hoeing with the assistance of her daughters and the "maid" (German, *magd*). To be sure she does not go extensively into vegetable-raising, nor has she a quantity of strawberries and small fruits; neither does she plant a great many peas and beans, that are laborious to "stick." She has a quantity of cabbages and of "red beets," of onions and of early potatoes, in her

garden, a plenty of cucumbers for winter pickles, and store of string-beans and tomatoes, with some sweet-potatoes.

Jacob R— told me that in one year, off of their small farm, they sold "two hundred dollars' worth of *wedgable* things, not counting the butter." As in that year the clothing for each member of the family probably cost from ten to fifteen dollars, the two hundred dollars' worth of vegetable things was of great importance.

Our Dutch never make *store-cheese*. At a county fair, only one cheese was exhibited, and that was from Chester county. The farmer's wife boards all the farm-hands, and the mechanics,—the carpenter, mason, etc., who put up the new buildings, and the fence-maker. At times she allows the daughters to go out and husk corn. It was a pretty sight which I saw one fall day,—an Amish man with four sons and daughters, husking in the field. "We do it all ourselves," said he.

In the winter mornings, perhaps the farmer's wife goes out to milk in the stable with a lantern, while her daughters get breakfast; has her house "redd up" about eight o'clock, and is prepared for several hours' sewing before dinner, laying by great piles of shirts for summer. We no longer make linen; but I have heard of one Dutch girl who had a good supply of domestic linen made into shirts and trousers for the future spouse, whose "fair proportions" she had not yet seen.

There are of course many garments to make in a large family, but there is not much work put upon them. We do not yet patronize the sewing-machine very extensively, but a seamstress or tailoress is sometimes called in. At the spring cleaning, the labors of the women folk are increased by whitewashing the picket fences.

In March we make soap, before the labors of the garden are great. The forests are being obliterated from this fertile tract, and many use what some call "consecrated" lye; formerly, the

ash-hopper was filled, and a good lot of egg-bearing lye run off to begin the soap with, while the weaker filled the soft-soap kettle, after the soap had "come." The chemical operation of soap-making often proved difficult, and, of course, much was said about luck. "We had bad luck, making soap." A sassafras stick was preferred for stirring, and the soap was stirred always in one direction. In regard to this, and that other chemical operation, making and keeping vinegar, there are certain ideas about the temporary incapacity of some persons,—ideas only to be alluded to here. If the farmer's wife never "has luck" in making soap, she employs some skilful woman to come in and help her. It is not a long operation here, for the Dutch rush this work speedily. If the lye is well run off, two tubs of hard soap and a barrel of soft soap can be made in a day. A very smart housekeeper can make a barrel of soap in the morning, and go visiting in the afternoon.

Great are the household labors in harvest; but the cooking and baking in the hot weather are cheerfully done for the men folks, who are toiling in hot suns and stifling barns. Four meals are common at this season, for "a piece" is sent out at nine o'clock. One Dutch girl made some fifty pies a week in harvest; for if you have four meals a day, and pie at each, many are required. We have great faith in pie.

In the neighboring county of York, an inexperienced Quaker wife was left in charge of the farm, and, during harvest, these important labors were performed by John Stein, John Stump, and John Stinger. She also had guests, welcome perhaps as "rain in harvest." To conciliate the Johns was very important, and she waited on them first. "What will thee have, John Stein?" "What shall I give thee, John Stump?" "And thee, John Stinger?" On one memorable occasion there was mutiny in the field, for John Stein declared that he never worked where there were not "kickelin" cakes in harvest, nor would he now. *Küchlein* proved to be cakes

fried in fat, and the housewife was ready to appease "Achilles' wrath," as soon as she made this discovery.

We used to make quantities of apple-butter in the fall, but of late years apples are not plentiful. We made in one season six barrels of cider into apple-butter, three at a time. Two large copper kettles were hung under the beech-trees, down between the spring-house and smoke-house, and the cider was boiled down the evening before, great stumps of trees being in demand. One hand watched the cider, and the rest of the family gathered in the kitchen, and labored diligently in preparing the cut apples, so that in the morning the "schnitz" might be ready to go in. (*Schneiden*, to cut, *geschnitten*.)

Two bushels and a half of cut apples will be enough for a barrel of cider. In a few hours the apples will all be in, and then you will stir, and stir, and stir, for you do not want to have the apple-butter burn at the bottom, and be obliged to dip it out into tubs, and scour the kettle. Some time in the afternoon, you will take out a little on a dish, and when you find that the cider no longer "weeps out" round the edges, but all forms a simple heap, you will dip it up into earthen vessels, and when cold take it "on" to the garret to keep company with the hard soap and the bags of dried apples and cherries, perhaps with the hams and shoulders. Soap and apple-butter are usually made in an open fireplace, where hangs the kettle. At one time, I have heard that there was apple-butter in the Lancaster Museum which dated from Revolutionary times; for we do not expect it to ferment in the summer. It dries away, but water is stirred in to prepare it for the table. Sometimes peach-butter is made, with cider, molasses or sugar, and, in the present scarcity of apples, cut pumpkin is often put into the apple-butter.

Soon after apple-butter making comes butchering, for we like an early pig in the fall, when the store of smoked meat has run out. Pork is the staple, and we smoke the flitches, not preserv-

ing them in brine like the Yankees. We ourselves use much beef, and do not like smoked flitch, but I speak for the majority. Sausage is a great dish with us, as in Germany. My sister and I went once on a few days' trip through the county, and were treated alternately to ham and mackerel, until, at the last house, we had both.

Butchering is one of the many occasions for the display of friendly feeling, when brother or father steps in to help hang the hogs, or a sister to assist in rendering lard, or in preparing the plentiful meal. An active farmer will have two or three porkers killed, scalded, and hung up by sunrise, and by night the whole operation of sausage and "scrapple" making, and lard-rendering, will be finished, and the house set in order. The friends who have assisted receive a portion of the sausage, etc., which portion is called the "Metzel-sup." The metzel-sup is also sent to poor widows, and others.

We make scrapple from the skin, a part of the livers, and heads, with the addition of corn-meal; but instead, our Dutch neighbors make *liver-wurst* ("woorsht") or meat pudding, omitting the meal, and this compound, stuffed into the large entrails, is very popular in Lancaster market. Some make *parwn-hans* from the liquor in which the pudding meat was boiled, adding thereto corn-meal. I have never seen hog's-head cheese in Dutch houses. If the boiling-pieces of beef are kept over summer, they are smoked, instead of being preserved in brine. We eat much smear-case (*Schmier-käse*), or cottage cheese, in these regions. The children, and grown people too, fancy it upon bread with molasses; which may be considered as an offset to the Yankee pork and molasses.

We have also Dutch cheese, which may be made by crumbling the dry smear-case, working in butter, salt, and chopped sage, forming it into pats, and setting them away to ripen. The *sieger-käse* is made from sweet milk boiled, with sour milk added, and beaten eggs, and then set to drain off the whey.

"Schnitz and knep" is said to be made of dried apples, fat pork, and dough dumplings, cooked together.

In the fall our Dutch make *sauerkraut*. I happened into the house of my friend Matty, when her husband and son were going to take an hour at noon, to help her with the kraut. Two white tubs stood upon the back porch, one with the fair round heads, and the other to receive the cabbage when cut by a knife set in a board (a very convenient thing for cutting cole-slaw and cucumbers). When cut, the cabbage is packed into a "stand" with a sauer-kraut staff, resembling the pounder with which New-Englanders beat clothes in a barrel. Salt is added during the packing. When the cabbage ferments, it becomes acid. The kraut-stand remains in the cellar; the contents not being unpalatable when boiled with the chins or ribs of pork, and potatoes. But the smell of the boiling kraut is very strong, and that stomach is probably strong which readily digests the meal.

Our Dutch make soup in variety, and pronounce the word short, between *soup* and *sup*. Thus there is Dutch sup, potato sup, and "noodle" (*Nudel*) sup, — which last is a treat. *Nudels* may be called domestic macaroni, and I have seen a dish called *schmelkty-nudels*, in which bits of fried bread were laid upon the piled-up *nudels*, — to me unpalatable from the large quantity of eggs in the *nudels*.

We almost always find good bread at our farm-houses. In travelling through Pennsylvania to Ohio, and returning through New York, I concluded that Pennsylvania furnished good bread-makers, New York good butter-makers, and that the two best bread-makers that I saw in Ohio were from Lancaster county. We make the pot of "sots" (New England "emptins") overnight, with boiled, mashed potatoes, scalded flour, and sometimes hops. Friday is baking-day, but in the middle of summer, when mould abounds, we bake twice a week. The Dutch housewife is very fond of baking in the brick oven, but

the scarcity of wood will gradually accustom us to the great cooking-stove.

We keep one fire in winter. This is in the kitchen, which with nice house-keepers is the abode of neatness, with its rag-carpet and brightly polished stove. An adjoining room or building is the wash-house, where butchering, soap-making, etc., are done by the help of a great kettle hung in the fireplace, not set in brick-work.

Adjoining the kitchen, on another side, is a state apartment, also rag-carpeted, and called "the room." The stove-pipe from the kitchen sometimes passes through the ceiling, and tempers the sleeping-room of the parents. These arrangements are not very favorable to bathing in cold weather; indeed, to wash the whole person is not very common in summer or winter. In the latter season, it is almost never done in town or country, by the Dutch.

Will you go up stairs in a neat Dutch farm-house? Here are rag-carpets again. Gay quilts are on the best beds, where green and red calico, perhaps in the form of a basket, are displayed on a white ground; or the beds bear brilliant coverlets of red, white, and blue, as if to "make the rash gazer wipe his eye." The common pillow-cases are sometimes of blue check, or of calico. In winter, people often sleep under feather-covers, not so heavy as a feather-bed. In the spring there is a great washing of bedclothes, and then the blankets are washed, which, during winter, supplied the place of sheets.

Holidays.

I was sitting alone, one Christmas time, when the door opened and there entered some half-dozen youths or men, who frightened me so that I slipped out at the door. They, being thus alone, and not intending further harm, at once left. These, I suppose, were Christmas mummers, though I heard them called "Bell-schnickel."

At another time, as I was sitting with my little boy, Aunt Sally came in smiling and mysterious, and took her place by the stove. Immediately after, there

entered a man in disguise, who very much alarmed my little Dan.

The stranger threw down nuts and cakes, and, when some one offered to pick them up, struck at him with a rod. This was the real Bell-schnickel, personated by the farmer. I presume that he ought to throw down his store of nice things for the good children, and strike the bad ones with his whip. Pelznickel is the bearded Nicholas, who punishes bad ones; whereas Krisskringle is the Christkindlein, who rewards good children.

On Christmas morning we cry, "Christmas-gift!" and not as elsewhere, "A merry Christmas!" Christmas is a day when people do not work, but go to meeting, when roast turkey and mince-pie are in order, and when the Dutch housewife has store of cakes on hand to give to the little folks.

We still hear of barring-out at Christmas. The pupils fasten themselves in the school-house, and keep the teacher out to obtain presents from him.

The first of April, which our neighbors generally call *Aprile*, is a great occasion. This is the opening of the farming year. The tenant farmer and other "renters" move to their new homes, and interest-money and other debts are due; and so much money changes hands in Lancaster, on the first, that pickpockets are attracted thither, and the unsuspicious Dutch farmer sometimes finds himself a loser.

The movings, on or about the first, are made festive occasions; neighbors young and old are gathered; some bring wagons to transport farm utensils and furniture, others assist in driving cattle, put furniture in its place, and set up bedsteads; while the women are ready to help prepare the bountiful meal. At this feast I have heard a worthy tenant farmer say, "Now help yourselves, as you did out there" (with the goods).

The Monday after Whitsuntide, which comes early in June, is a great holiday with the young Dutch folk. It occurs when there is a lull in farm-work, between corn-planting and hay-making. Now the new summer bonnets are all

in demand, and the taverns are found full of youths and girls, who sometimes walk the street hand-in-hand, eat cakes and drink beer, or visit the "flying horses." A number of seats are arranged around a central pole, and, a pair taking each seat, the whole revolves by the work of a horse, and you can have a *circular* ride for six cents.

On the Fourth of July we are generally at work in the harvest-field. Several of the festivals of the Church are held here as days of rest, if not of recreation. Such are Good-Friday, Ascension-day, etc. On Easter, eggs colored and otherwise ornamented were formerly much in vogue, but the custom of preparing them is dying out.

Thanksgiving is beginning to be observed here, but the New-Englander would miss the family gatherings, the roast turkeys, the pumpkin-pies. Possibly we go to church in the morning, and sit quiet for the rest of the day; and as for pumpkin-pies, we do not greatly fancy them. Raisin-pie, or mince-pie, we can enjoy.

The last night of October is "Hallow-eve." I was in Lancaster last Hallow-eve, and the boys were ringing door-bells, carrying away door-steps, throwing corn at the windows, or running off with an ungarded wagon. I heard of one or two youngsters who had requested an afternoon holiday to go to church, but who had spent their time in going out of town to steal corn for this occasion. In the country, farm-gates are taken from their hinges and removed, and it was formerly a favorite boyish amusement to take a wagon to pieces, and after carrying the parts up to the barn-loft, to put it together again, thus obliging the owner to take it apart and bring it down. Such "tricks," as described by Burns in the poem of "Hallow-e'en," may be heard of occasionally, perpetrated perhaps by the Scotch-Irish element in our population.

Public Schools.

About twenty years ago, I was circulating an anti-slavery petition among

women. I carried it to the house of a neighboring farmer, a miller to boot, and well to do. His wife signed the petition (*all* women did not in those days), but she signed it with her mark. I have understood that it is about twenty years since the school law was made universal here, and that our township of Upper Leacock wanted to resist by litigation the establishment of public schools, but finally decided otherwise.* It is the school-tax that is onerous. Within the last twenty years a great impetus has been given to education by the establishment of the County Superintendency of Normal Schools and of Teachers' Institutes. I think it is within this time that the Board of Directors met, in an adjoining township, and, being called upon to vote by ballot, there were afterwards found in the box several different ways of spelling the word "no."

At the last Institute, a worthy young man at the blackboard was telling the teachers how to make their pupils pronounce the word "did," which they inclined to call *dîd*; and a young woman told me that she found it necessary, when teaching in Berks County, to practise speaking Dutch, in order to make the pupils understand their lessons. It must be rather hard to hear and talk Dutch almost constantly, and then go to a school where the textbooks are English.

There is still an effort made to have German taught in our public schools. The reading of German is considered a great accomplishment, and one necessary in a candidate for the ministry; but the teacher is generally overburdened in the winter with the *necessary* branches in a crowded, ungraded school. Our township generally has school for seven months in the year; some townships have only five; and in Berks County I have heard of one having only four months. About thirty-five dollars a month is paid to teachers, male and female.

* In a recent paper I find this statement: "West Cocalico did not until recently accept the provisions of the General School Law of the State."

My little boy of seven began to go to public school this fall. For a while I would hear him repeating such expressions as, "Che, double o, t, cood" (meaning good). "P-i-g, pick." "Kreat A, little A, pouncing P." "I don't like chincherepread." Even among our Dutch people of more culture, *elch* is heard for *aich* (H), and it is a relic of early training.

The standard of our County Superintendent is high, and his examinations severe. His salary is about \$1,700. Where there is so much wealth as here, it seems almost impossible that learning should not follow, as soon as the minds of the people are turned toward it; but the great fear of making their children "lazy" operates against sending them to school. Industrious habits will certainly tend more to the pecuniary success of a farmer than the "art of writing and speaking the English language *correctly*."

Manners and Customs.

My dear old "English" friend, Daniel G—, had often been asked to stay and eat with John B—, and on one occasion he concluded to accept the invitation. They went to the table, and had a silent pause; then John cut up the meat, and the workmen and members of the family each put in a fork and helped himself. The guest was discomfited, and, finding that he was likely to lose his dinner otherwise, he followed their example. The invitation to eat had covered the whole. When guests are present, many say, "Now help yourselves," but they do not use vain repetitions, as the city people do.

Coffee is still drank three times a day in some families, but frequently without sugar. The sugar-bowl stands on the table, with spoons therein for those who want sugar; but at our late "home-coming" party, I believe that I was the only one at the table who took sugar. The dishes of smear-case, molasses, apple-butter, etc., are not always supplied with spoons. *We* dip in our knives, and with the same useful imple-

ments convey the food to our mouths. Does the opposite extreme prevail among the farmers of Massachusetts? Do they always eat with their forks, and use napkins? Those who eat with John Stein, John Stump, and John Stinger will be likely to accommodate their habits to those of the Johns.

On many busy farm occasions, the woman of the house will find it more convenient to let the men eat first, — to get the burden of the harvest dinner off her mind and her hands, and then sit down with her daughters, her "maid," and little children, to their own repast. But the allowing to the men the constant privilege of eating first has passed away, if, indeed, it ever prevailed. At funeral feasts the old men and women sit down first, with the mourning family. Then succeed the second, third, and fourth tables.

We Lancaster Dutch are always striving to seize Time's forelock. *We* rise, even in the winter, about four, feed the stock while the women get breakfast, eat breakfast in the short days by coal-oil lamps or tallow candles, and by daylight are ready for the operations of the day. The English folks and the backsliding Dutch cry out when they hear their neighbors blow the horn or ring the bell for dinner. On a recent pleasant October day, the farmer's wife was churning out of doors, and cried, "Why, there's the dinner-bells a'ready. Mercy days!" I went in to the clock, and found it at twenty minutes of eleven. The Dutch farmers almost invariably keep their time half an hour or more ahead, like that village of Cornwall, where it was twelve o'clock, but half past eleven to the rest of the world. Our Dutch are not seen running to catch a railroad train.

We are not a total-abstinence people. Before these times of high prices, liquor was often furnished to hands in the harvest-field.

A few years ago a meeting was held

in a neighboring school-house, to discuss a prohibitory liquor law. After various speeches, the question was put to the vote thus: "All those who want leave to drink whiskey will please to rise." "Now all those who don't want to drink whiskey will rise." The affirmative had a decided majority.

Work is a cardinal virtue with the Dutchman. "He is lazy," is a very opprobrious remark. At the quilting, when I was trying to take out one of the screws, Katy Groff, who is sixty-five, exclaimed: "How lazy I am, not to be helping you!" "Wie ich bin faul."

Marriages sometimes take place between the two nationalities; but I do not think the Dutch farmers desire English wives for their sons, unless the wives are decidedly rich. On the other hand, I heard of an English farmer's counselling his son to seek a Dutch wife. When the son had wooed and won his substantial bride, "Now he will see what good cooking is," said a Dutch girl to me. I was surprised at the remark, for his mother was an excellent housekeeper.

The circus is the favorite amusement of our people. Lancaster papers often complain of the slender attendance which is bestowed upon lectures, and the like. Even theatrical performances are found "slow," compared with the feats of the ring.

Our Dutch use a freedom of language that is not known to the English, and which to them savors of coarseness. "But they mean no harm by it," says one of my English friends. It is difficult to practise reserve, where the whole family sit in one heated room. This rich limestone land in which the Dutch delight is nearly level to an eye trained among hills. Do hills make a people more poetical or imaginative?

Perhaps so, but there is vulgarity too among the hills.

WETTSTEIN.

IT is a pleasant thing to be a colonel of cavalry in active field-service. There are circumstances of authority and of responsibility that fan the latent spark of barbarism which, however dull, glows in all our breasts, and which generations of republican civilization can never fully quench. We may not have confessed it even to ourselves; but on looking back to the years of the war, we must recognize many things that patted our vanity greatly on the back,—things so different from all the dull routine of equality and fraternity of home, that those four years seem to belong to a dream-land, over which the haze of the life before them and the life after them draws a misty veil. Equality and Fraternity! a pretty sentiment, yes, and full of sensible and kindly regard for all mankind, and full of hope for the men who are to come after us; but Superiority and Fraternity! who shall tell all the secret emotions this implies? To be the head of the brotherhood, with the unremitted clank of a guard's empty scabbard trailing before one's tent-door day and night, with the standard of the regiment proclaiming the house of chief authority, with the respectful salute of all passers, and the natural obedience of all members of the command, with the shade of deference that even comrades show to superior rank, and with that just sufficient check upon coarseness during the jovial bouts of the head-quarters' mess, making them not less genial, but void of all offence,—living in this atmosphere, one almost feels the breath of feudal days coming modified through the long tempestuous ages to touch his cheek, whispering to him that the savage instinct of the sires has not been, and never will be, quite civilized out of the sons. And then the thousand men, and the yearly million that they cost, while they fill the cup of the colonel's responsibility (some-

times to overflowing), and give him many heavy trials,—they are his own men; their usefulness is almost of his own creation; and their renown is his highest glory.

I may not depict the feelings of others; but I find in the recollection of my own service—as succeeding years dull its details and cast the nimbus of distance about it—the source of emotions which differ widely from those to which our modern life has schooled us.

One of the colonel's constant attendants is the chief bugler, or, as he is called in hussar Dutch, the "Stabstrom-paytr": mine was the prince of Trompaytrs, and his name was Wettstein. He was a Swiss, whose native language was a mixture of guttural French and mincing German. English was an impossible field to him. He had learned to say "yes" and "matches"; but not one other of our words could he ever lay his tongue to, except the universal "damn." But for his bugle and his little gray mare, I should never have had occasion to know his worth. Music filled every pore of his Alpine soul, and his wonderful Swiss "Retreat" must ring to this day in the memory of every man of the regiment whose thoughts turn again to the romantic campaign of South Missouri. What with other buglers was a matter of routine training was with him an inspiration. All knew well enough the meaning of the commands that the company trumpets stammered or blared forth; but when they rang from Wettstein's horn, they carried with them a *vim* and energy that secured their prompt execution; and his note in the wild Ozark Hills would mark the head-quarters of the "Vierte Missouri" for miles around. From a hill-top, half a mile in advance of my marching command, I have turned the regiment into its camping-ground and dismounted it in perfect order by the

melodious telegraphy of Wettstein's brazen lips alone.

That other chief attribute of his, Klitschka, his little beast, stayed longer with me than his bugle did, and is hardly less identified with the varied reminiscences of my army life. I bought her, as a prize, with the original mount of the regiment, in Frémont's time, and was mildly informed by that officer that I must be careful how I accepted many such animals from the contractor, though a few for the smaller men might answer. Asboth, Frémont's chief of staff, with a scornful rolling up of his cataract of a mustache, and a shrug of his broad, thin shoulders, said: "Why for you buy such horses? What your bugler ride, it is not a horse, it is a cat." His remark was not intended as a question, and it ended the conversation. Months after that, he eagerly begged for the nine-lived Klitschka for one of his orderlies; being refused him, she remained good to the end. She was an animal that defied every rule by which casual observers test the merit of a horse; but analytically considered she was nearly perfect. Better legs, a better body, and a better head, it is rare to see, than she had. But she lacked the arched neck and the proud step that she needed all the more because of her small size. By no means showy in figure or in action, it took a second look to see her perfect fitness for her work. Her color was iron-gray, and no iron could be tougher than she was; while her full, prominent eye and ample brain-room, and her quick little ear, told of courage and intelligence that made her invaluable throughout four years of hard and often dangerous service. Like many other ill-favored little people, she was very lovable, and Wettstein loved her like a woman. He would never hesitate to relax those strict rules of conduct, by which German cavalry-men are supposed to govern themselves, if it was a question of stealing forage for Klitschka; and he was (amiable fellow!) never so happy as when, from a scanty supply in the country, he had taken

enough oat-sheaves to bed her in and almost cover her up, while other horses of the command must go hungry; and was never so shaken in his regard for me as when I made him give up all but double rations for her.

Double rations she often earned, for Wettstein was a heavy youth, with a constitutional passion for baggage out of all proportion to his means of transportation. Mounted for the march, he was an odd sight. Little Klitschka's back, with his immense rolls of blankets and clothing before and behind, looked like a dromedary's. Planted between the humps, straight as a gun-barrel, the brightest of bugles suspended across his back by its tasselled yellow braid, slashed like a harlequin over the breast, his arms chevroned with gorgeous gold,—Wettstein, with his cap-front turned up so as to let the sun fall full on his frank blue eye and his resolute blond mustache, was the very picture of a cavalry bugler in active campaign.

Smoking, gabbling, singing, rollicking, from morning until night, and still on until morning again if need be, he never lost spirit nor temper. He seemed to absorb sunshine enough during the day to keep every one bright around him all night. When at last his bugle had been stilled forever, we long missed the cheer of his indomitable gayety; wearying service became more irksome than while his bubbling mirth had tempered its dullness; and even little Klitschka, although she remained an example of steady pluck, had never so potent an influence as while he had put his own unfailing mettle into her heels. After she was bequeathed to me, she was always most useful, but never so gay and frisky as while she carried her own devoted groom. No day was too long for her and no road too heavy; her brisk trot knew no failing, but she refused ever again to form the personal attachment that had sealed her and Wettstein to one another.

The two of them together, like the fabled Centaur, made the complete creature. He with the hardened frame and

bright nature of his Alpine race, and she with her veins full of the Mustang blood of the Rocky Mountains, were fitted to each other as almost never were horse and rider before. Their performances were astonishing. In addition to a constant attendance on his commander (who, riding without baggage, and of no heavier person than Wettstein himself, sometimes fagged out three good horses between one morning and the next), the Trompaytr yet volunteered for all sorts of extra service,—carried messages over miles of bad road to the general's camp, gave riding-lessons and music-lessons to the company buglers, and then—fear of the guard-house and fear of capture always unheeded—he never missed an opportunity for the most hazardous and most laborious foraging.

He was a thorough soldier, — always “for duty,” always cleanly, always handsome and cheery, and heedlessly brave. If detected in a fault (and he was, as I have hinted, an incorrigible forager), he took his punishment like a man, and stole milk for himself or fodder for Klitschka at the next convenient (or inconvenient) opportunity, with an imperturbability that no punishment could reach.

Once, when supplies were short, he sent me, from the guard-house where he had been confined for getting them, a dozen bundles of corn-blades for my horses; not as a bribe, but because he would not allow the incidents of discipline to disturb our friendly relations: and in the matter of fodder in scarce times he held me as a helpless pensioner, dependent on his bounty. When in arrest by my order, his “*Pon chour, Herr Oberist,*” was as cordial and happy as when he strolled free past my tent. Altogether I never saw his like before or since. The good fortune to get such a bugle, such a soldier, and such a mount combined, comes but once in the lifetime of the luckiest officer. It was only his uncouth tongue that kept him from being pilfered from me by every general who had the power to “detail” him to his own head-quarters.

So universal, by the way, was this petty vice of commanding officers, that I was never safe until I adopted the plan, in selecting a staff officer, of securing his promise to resign from the service point-blank if ordered to other duty, and more than one offended general was indignant at my policy. With Wettstein, I felt perfectly easy, for the average capacity of brigadier-generals stopped far short of the analysis of his dual jargon. Several tried him for a day, but they found that his comprehension was no better than his speech, and that his manifest ability was a sealed book to them. He always came home by nightfall with a chuckle and, “*Le général versteht mich nicht. Je blase ‘marrsch’ für ‘halt.’*”

So it was that, for a couple of years, this trusty fellow trotted at my heels through rain and shine, by day and by night, with his face full of glee, and his well-filled canteen at the service of our little staff. Mud and mire, ditches and fences, were all one to him and Klitschka; and in Vix's day they followed her lead over many a spot that the others had to take by flank movement.

Our work in Missouri was but little more than the work of subsistence. We were a part of an army too large for any Rebel force in that region to attack, and too unwieldy to pursue guerillas with much effect. But now and then we made a little scout that varied our otherwise dull lives; and at such times Wettstein always attached himself to the most dangerous patrolling party, and Klitschka was usually the first to bring back news of the trifling encounters.

At last, in February, 1863, when we had lain for a month in delicious idleness in the heart of a rich country, literally flowing with poultry and corn-fodder, I, being then in command of a division of cavalry, received an order from Davidson to select six hundred of the best-mounted of my men, and to attack Marmaduke, who was recruiting, ninety miles away, at Batesville on the White River in Arkansas. His

main body, three thousand five hundred strong, lay in the "Oil-Trough Bottom," on the other side of the river. A brigade of Western infantry was to march as far as Salem (thirty miles), and to support me if necessary; though I afterward found that at the only moment when I might have had grave occasion to depend on them, they were, with an inconsistency that was not the least attribute of my commanding officer, withdrawn without notice to me.

We were to go in light marching order, carrying only the necessary clothing, and rations of salt and coffee. Wettstein's ideas of lightness differing from mine, I had to use some authority to rid poor Klitschka of saucepans, extra boots, and such trash; and after all, the rascal had, under the plea of a cold, requiring extra blankets, smuggled a neatly sewn sausage of corn, weighing some fifteen pounds, into one of his rolls. Eager men, too, whose horses were out of trim, had to be discarded, and the whole detail to be thoroughly overhauled. But the jovial anticipation of seeing Batesville once more — a New England village planted on a charming hill-side in Arkansas, where we had sojourned with Curtis the summer before, and where we all had the pleasant acquaintance that even an enemy makes in a town from which the native men have long been gone, and only the women remain — made the work of preparation go smoothly, and long before dawn Wettstein's bugle summoned the details from the several camps. There was a ringing joyousness in his call, that spoke of the cosey, roaring fire of a certain Batesville kitchen to which his bright face and his well-filled haversack had long ago made him welcome, and prospective feasting gave an added trill to his blast.

The little detachments trotted gayly into line, officers were assigned for special duty, temporary divisions were told off, and a working organization was soon completed. Before the sun was up, such a Ra, t't'a, t't'a, t't'a! as South Missouri had never heard before, broke the line by twos from the right,

and we were off for a promising trip. Marmaduke we knew of old, and personal cowardice would have deterred no one from joining our party, for he could be reached from our stronger army only by a complete surprise; and in a country where every woman and child (white, I mean) was his friend and our enemy, a surprise, over ninety miles of bad roads, seemed out of the question. Indeed, before we had made a half of the distance, one of his flying scouts told a negro woman by the road-side, as he checked his run to water his horse, "There's a hell's-mint o' Yanks a comin' over the mountain, and I must git to Marmyjuke"; and to Marmaduke he "got," half a day ahead of us, only to be laughed at for a coward who had been frightened by a foraging-party.

The second night brought us to Evening Shade, a little village, where one Captain Smith was raising a company. They had all gone, hours ahead of us, but had left their supplies and their fires behind them, and these, with the aid of a grist-mill (for which an Illinois regiment furnished a miller), gave us a bountiful supper. At daybreak we set out for our last day's march, still supposing that Marmaduke's men would put the river between themselves and us before night, but confident of comfortable quarters at Batesville. A few miles out, we began to pick up Rebel stragglers, and Wettstein soon came rattling through the woods, from a house to which he had been allowed to go for milk, with the story of a sick officer lodged there. Following his lead with a surgeon and a small escort, I found the captain of the Evening Shade company lying in a raging fever, with which he had found it impossible to ride, and nearly dead with terror lest we should hang him at once. His really beautiful young wife, who had gone to enliven his recruiting labors, was in tears over his impending fate. While we were talking with him concerning his parole, she bribed Wettstein with a royal pair of Mexican spurs to save his life, evidently thinking from his display of finery that he was a major-general at

the very least. The kind fellow buckled the spurs on my heels, and they evidently gave me new consequence in his eyes as we rode on our way.

Presently we struck a party of about twenty-five, under a Captain Mosby, who had been making a circuit after conscripts and had had no news of us. After a running fight, during which there occurred some casualties on the other side, we captured the survivors of the party and sent them to the rear.

From midday on, we heard rumors of a sally in strong force from Batesville, and were compelled to move cautiously,—straggling parties of Rebel scouts serving to give credibility to the story. At sunset we were within six miles of the town; and, halting in the deep snow of a large farm-yard, I sent a picked party of thirty, under Rosa, to secure the ferry if possible,—Wettstein and Klitschka accompanying to bring back word of the result. After two anxious hours, he came into camp with a note from Rosa: "Marmaduke is over the river and has the ferry-boat with him; three of his men killed. Wettstein did bravely." The poor fellow had a bad cut on his arm and was in pain, but not a moment would he give himself until brave little Klitschka, smothered in bright straw, was filling herself from the smuggled bag of corn. At last he came to the surgeon and had his wounded arm duly dressed. Although evidently suffering and weak from loss of blood, he gave us a cheering account of Rosa's fight, and dwelt fondly on the supper he had bespoken for us at good Mrs. —'s house, where we had quartered in the summer. At nine o'clock, after Klitschka had fed and the patrols had come in, we set out on our march. It was still snowing hard, and even the dead men that marked Rosa's recent ride were fast being shrouded in purest white. One of them Wettstein pointed out as the man with whom he had crossed sabres, and he asked permission to stay with the party detailed to bury him, for he had been a "braff homme." With his tender sympathy for friend or

foe, he was a truer mourner than a dead soldier often gets from the ranks of his enemy. Even this sad ride came to an end, as all things must, and at the edge of the town soldierly Rosa stood, to report that the pickets were posted and our quarters ready. Giving him a fresh detail to relieve his pickets, and asking his company at our midnight supper, we pushed on to our chosen house. Here we found all in order, save that the young lady of the family had so hastily put on the jacket bearing the U. S. buttons of her last summer's conquests, that she failed quite to conceal the C. S. buttons on a prettier one under it. She and her mother scolded us for driving the Rebel beaux from town, when there was to have been a grand farewell ball only the next night; but they seemed in no wise impressed with regret for the friends who had been killed and wounded in the chase. It turned out that Marmaduke had grown tired of reports that we were marching on him in force, and would not believe it now until his own men rode into town at nightfall, with the marks of Rosa's sabres on their heads. The place had been filled with the officers of his command, and he with them, come for their parting flirtations before the ball. They were to march to Little Rock, and their men were nearly all collected in the "Bottom," over the river. On this sudden proof of the attack, they made a stampede for the flat-boat of the rope-ferry and nearly sunk it by over-crowding, the hindmost men cutting the rope and swimming their horses across the wintry torrent.

We had full possession of the town and were little disturbed by the dropping shots from the Rebel side. We visited on our unfaithful friends such punishment as enforced hospitality could compass, and on the whole we had n't a bad time. The morning after our arrival we levied such contributions of supplies as were necessary for our return march, and, in order that the return might not look like a retreat, we loaded two wagons with hogsheds of

sugar (which would be welcome in Davidson's commissariat), and made every arrangement for the establishment of the camp of the whole army in the country back of the town; for our force was so small that, with our tired horses, it would have been imprudent to turn our backs to Marmaduke's little army, if he supposed us to be alone.

Keeping the town well picketed and making much show of laying out an encampment, I started the teams and the main body of the command at nightfall, holding back a hundred men for a cover until a later hour.

During the evening the Rebels on the south side of the river became suspiciously quiet, and there was apparently some new movement on foot. The only possible chance for an attack was by Magnus's ferry, ten miles below, where the boat was so small and the river so wide that not more than twenty horses could be crossed in an hour, and my sharpshooters were sufficient to prevent the removal of the Batesville boat to that point. Still it was important to know what was going on, and especially important to prevent even a scouting party of the enemy from harassing the rear of my tired column by the shorter road from Magnus's to Evening Shade; and I started at nine o'clock (when the moon rose), with twenty men, to go round that way, directing the remainder of the rear-guard to follow the main body at midnight.

The ride to Magnus's was without other adventure than bad roads and almost impassable bayous always entail, and in a few hours we reached the plantation, where I had a former ally in an old negro, who had done us good service during Curtis's campaign. He said that the Rebels had left the Bottom, and were going to Little Rock, but as a precaution he took a canoe and crossed over to the house of another negro on the south bank, and returned with a confirmation of his opinion. As it was very important to know whether the only enemy of Davidson's army had really withdrawn from his front, and as

this might be definitely learned through the assistance of an old scout who lived in the edge of the Bottom, it seemed best to cross the river to give him instructions for his work.

I took Roubie, my best horse. He was a sure reliance under all circumstances, and he and I knew each other perfectly. We were at home in every foot-path in the country, having had many a summer's swim in this very river; and now, accompanied only by Wettstein and Klitschka, I went on to the ferry-boat. It was what is known as a "swing" ferry. A stout rope is stretched between trees on the opposite shores, and the boat is attached to a couple of pulleys arranged to traverse the length of this rope. The attaching cords—one at each end of the upstream side of the boat—are long enough to allow it to swing some rods down the stream; by shortening one of the ropes and lengthening the other, the boat is placed at an angle with the swift current, which propels it toward one shore or the other, the pulleys keeping pace in their course on the main rope.

The main rope was rough from long use, and often the pulleys would halt in their course, until the pull of the advancing boat dragged them free. Then the rickety craft, shivering from end to end, would make a rapid shoot, until another defective place in the rope brought her to again. At each vibration, the horses nearly lost their feet, and the surging stream almost sent its muddy water over the gunwale. It was a long and anxious trip,—the rotten guy-rope hardly serving to hold us to our course. At last we reached the shore and rode on, to Craikill's house in the Bottom. He had been "conscripted," and forced to go with the army, so his wife told us, and she had seen him march with the rest on the Fairview Road for Little Rock. The last bird had flown, and we could safely march back at our leisure.

Wettstein filled his pipe, emptied his haversack for the benefit of Craikill's hungry children, and, cheery as ever,

followed me to the ferry. On the way over he had been as still as a mouse, for he was too old a soldier to give an enemy any sign of our approach. But, as we set out on the return trip, in the cold moonlight, he sang the "*Ranz des Vaches*," fondled his little mare, and, unmindful of his wounded arm, gave way to the flow of spirits that the past few days' duty had checked. I never knew him more gay and delightful; and, as we stood leaning on our saddles and chatting together, I congratulated myself upon the possession of such a perpetual sunbeam.

We were barely half-way across, when suddenly, coming out of the darkness, riding half hidden in the boiling, whirling tide, a huge floating tree struck the boat with a thud that parted the rotten guy-rope, and carried us floating down the stream. For a moment there seemed no danger, but a branch of the tree had caught the corner of the boat, and the pulleys had become entangled in the rope. When this had been drawn to its full length, and the tree felt the strain, the boat dipped to the current; filled, and sank under our feet. I called to Wettstein to take Klitschka by the tail, but it was too late: he had grasped the saddle with the desperation of a drowning man, and made her fairly helpless. The boat soon passed from under us, and, relieved of our weight, came to the surface at our side, but, bringing the rope against poor Wettstein's wounded arm, tore loose his hold, and soon went down again in the eddy, and Klitschka was free.

"Adieu, Herr Oberist, tenez Klitschka pour vous! Adieu!" And that happy, honest face sank almost within reach of me. The weight of his arms prevented his rising again, and only an angry eddy, glistening in the moonlight, marked his turbid grave.

Roubie, snorting, and struggling hard with the current, pulled me safely to the shore, and little Klitschka followed as well as her loaded saddle would permit. For the moment, with my own life and the lives of two tried companions to care for, I thought of nothing else; but as I sat drying at Magnus's roaring hearth the direst desolation overwhelmed me. Very far from home,—far even from the home-like surroundings of my own camp,—I had clung to this devoted fellow as a part of myself. He was a proven friend; with him I never lacked the sympathy that, in the army at least, is born of constant companionship, and he filled a place in my life that dearer friends at home might not find. He was the one comrade whose heart, I was sure, was filled only with unquestioning love for me. Henceforth I must look for support to companions who saw me as I was, who knew my faults and my weaknesses, and whose kind regard was tempered with criticism. The one love that was blind, that took me for better or for worse, had been, in an instant, torn from my life, and I was more sad than I can tell.

But Duty knows no sentiment. A saddened party, we mounted, to join the main command; and, as we rode on through the rest of that desolate night, no word passed to tell the gloom that each man felt.

The petty distinctions of earthly rank were swallowed up in a feeling of true brotherhood, and Wettstein—promoted now—rode at our head as a worthy leader, showing the way to a faithful performance of all duty and a kindly and cheerful bearing of all life's burdens; and, through the long and trying campaigns that followed, more than one of us was the better soldier for the lesson his soldierly life had taught.

THE INCREASE OF HUMAN LIFE.

PART I.

THE halcyon days are in the past, and these are the days of degeneracy.

We hear these complaints, now and then, from persons whose eyes and ears are open to the evil and the suffering present to and around them, which they see and hear and feel, while they remember, or read of, or learn by tradition, only or mainly the virtues that were manifested, the good works that were accomplished, and the blessings that were enjoyed by their fathers. These are sad times, the world is going backward, say they; and then they hang their heads in despair of the future.

The same was said last year and in the last century. Looking through the records of many hundred years past, we find, in every age, the same complaints, the same sorrowful discontent with the present, the same hopeless distrust of the future, and the same respect for the past.

Prominent among these complaints is the one that human life is waning, that a larger proportion die in childhood and youth, and that of those who survive their twentieth year a smaller proportion are permitted to enjoy the full period of labor and usefulness, and die in a good old age.

All this is without foundation. The sanitary history of the world shows that the reverse of this opinion is true, that life has been increasing both in power and in duration, and that it is now increasing more than ever before. As mankind has emerged from the rude conditions of barbarism, and made progress in civilization, there has been an almost constant improvement in life. As man has added to his means of subsistence and of protection, and to his comforts, in house and clothing, he has strengthened himself against destructive influences, saved himself from or carried

himself through the assaults of disease, and added to the number of his years on earth.

Early Records.

In the earlier periods of the world, no records were kept of disease and death, of life and its duration. Such records were few and far between in all ages until the present century. Even those that were made were not universal among any people. They were confined to special classes, and often made only for special purposes.

The records of the earlier ages were loosely made, and are probably sometimes mixtures of fact and fable, including what the writers thought as well as what they knew to be true. Moreau de Jonnès, the French writer on population, in his work on the Populations of Antiquity, says: "The ancients were very prone to exaggerate numbers." This French statistician finds much sympathy among those who wish to compare ancient with modern representations of similar facts in similar circumstances, or to estimate the value of old records in connection with the conditions attached to and with the circumstances that surrounded the things they describe.

None of the nations of antiquity and none in the Middle Ages took account and made general and public record of the three great events of man,—his birth, marriage, and death. It is only within four hundred years that in any nation, state, or town such reliable records have been kept by public authority as will show the longevity of the people; and although, in most civilized countries, these facts are now recorded with various degrees of fulness and accuracy, yet few of the records reach back into the last century; most of them have been begun, or have been made reliable, within less than fifty years.

Ancient Roman Life.

The oldest account of the mathematical value of human life is that of Ulpianus, — a Roman judge in the time of the Emperor Alexander Severus, — extending from two hundred and twenty-two to two hundred and thirty-five years after the Christian era. For the purpose of determining the value of life-estates, reversions, etc., he made inquiry as extensively as he could, and enlisted others to aid him as far as possible, and from their observations and researches into the personal history of many who had passed away, he calculated the average number of years that they had lived from birth, from their twentieth, twenty-fifth, thirtieth years, and other quinquennial epochs, and came to the reasonable conclusion that others, then and thereafter living, would enjoy, on an average, the same longevity, from birth and from the several other periods of life.

These calculations of Ulpianus, as to the value of life at birth and at the several after-ages, were adopted by the Roman courts as their rule in determining the worth of life-rights, reversions, etc. They seem to have been held in undisputed authority for the guidance of the judicial tribunals in these matters; and in the year 533, three hundred years after Ulpianus had made them, they were incorporated into and made a part of the Pandects of Justinian, by the learned commission which the emperor had appointed to revise and codify the Roman law.* During this period, and afterward while the Empire continued, these principles continued to be received by the courts and people as the true representation of the longevity of the richer, more cultivated, and favored classes among whom the original observations were made.

Mediæval Records of Mortality.

The oldest trustworthy and comprehensive record of modern times is that which has been kept in the canton and

city of Geneva, in Switzerland, for near four hundred years. The Genevans carefully recorded the ages of the deceased, and the number of births, and prepared and left a means of determining the value of life, and of showing its advancement through the last four centuries.

Many of the English towns and parishes took account of the baptisms and burials; and at times in some the causes of death were stated, from the middle of the sixteenth century. Similar records were made and have come down to us, covering the same period, in many towns of Germany and Holland, and in some of France.

About two hundred years ago John Graunt, an Englishman, wrote a book entitled, "*Philosophical Observations on Bills of Mortality.*" A hundred years later Dr. Thomas Short published a work on the "*Increase and Decrease of Mankind.*" Corbyn Morris made another valuable contribution to the history of life and mortality in the sixteenth, seventeenth, and eighteenth centuries, by his history of the "*Present and Past Growth of London.*"

These valuable and laborious writers seem to have been most diligent and painstaking in their researches into every sort of record that referred to death and its causes. They examined the town, city, parish, and church records of baptisms and burials, and in their books we find most important tables and statements of the numbers of baptisms and of burials in many towns and cities in England, and in some on the continent. Morris gives several tables, showing the numbers that perished from each fatal disease in London, in periods of years, from 1575 to 1757.

One of the most valuable sanitary histories of the world is the first volume of Part V. of the census of Ireland for 1851, a folio of five hundred and sixty pages. The author of this work went back in his researches, through history, record, and tradition, to ages before the Christian era, and, as far as his means allowed, showed the prevalent diseases

* Justiniani Pandectar, Lib. 35, Tit. 2. Ad Legem Falcidiam.

and general mortality in Ireland, England, and some other countries of Europe, during more than two thousand years.

Mortality in Former and Present Times.

All these and other records of early times show the great prevalence and severity of many diseases—and especially those of childhood—that are now comparatively infrequent and harmless.

Cities were more unhealthy and destructive than they are now. The records of these places were made more fully and have been better preserved than those of the country districts. They show that some of the dense towns could not sustain their own population from generation to generation. Their deaths were more than their births, and they were indebted to immigration from the country for the continuance as well as the increase of their inhabitants.

In London, in the seventy-eight years from 1604 to 1682,—including the several ravages of the plague,—the births were six hundred and ninety-nine thousand six hundred and seventy-five, and the burials nine hundred and sixty-four thousand eight hundred and eighty-two.*

In the ten years, 1851 to 1860, there were, in London, eight hundred and sixty-four thousand two hundred and sixty-three births,† and six hundred and ten thousand four hundred and seventy-three deaths.‡ In the former period, for every hundred births there were one hundred and thirty-seven burials; and in the latter period, for every hundred births there were seventy-eight burials.

Not including the mortality from the plague, two hundred years ago, the deaths were one in twenty of the living, and including those from the plague the annual mortality was one in twelve and a half of the living. Now the rate

of death is only one in forty-two and thirty-one hundredths.*

In Dresden, 1617 to 1700, there were forty-six thousand four hundred and twenty-three births, and sixty-six thousand four hundred and sixty deaths.†

In Augsburg, through two hundred years,—1500 to 1700,—the births were two hundred and eighty-five thousand four hundred and twelve, and the deaths three hundred and twenty-six thousand one hundred and ninety.‡

In Breslau, the births were one hundred and eight thousand nine hundred and nineteen, and deaths one hundred and twenty-five thousand six hundred and eighty-five, in the period from 1633 to 1734.†

In Paris, from 1728 to 1737, one hundred and sixty-eight thousand one hundred and ninety-nine were born, and one hundred and eighty-two thousand four hundred and eighty-one died.† In the eight years, 1853 to 1860 inclusive, the births were four hundred and thirty-three thousand seven hundred and seventy-five, and deaths three hundred and eighty thousand five hundred and seventy.‡ For every hundred births, in each of these periods, there were one hundred and eight deaths in the former, and eighty-eight deaths in the latter.

In Prussia, for every hundred children born, in each period, there were sixty-six deaths from 1698 to 1702,§ and sixty-two in the three years, 1861, 1862, and 1863.‖

In Silesia, the rate of mortality was one in thirty-one of the living, in the years 1728 to 1735, and one in thirty-five in the three years, 1861 to 1863.‖

Eighty-eight years ago, the mortality in Berlin was one in twenty-eight.¶ It is now one in thirty-seven and a half.‡

* Calculated from Short's and Registrar-General's Reports.

† Short, Increase and Decrease of Mankind, pp. 155, 161.

‡ Statistique de la France, 1860, Vol. XI. pp. xxiv., xxxiv.

§ Price, Reversionary Payments, II. p. 314.

‖ Preussische Statistik, 1864.

¶ Price, Observations in Cyclopædia Americana. ‡

* Graunt, Bills of Mortality, p. 43.

† Registrar-General's 15th to 24th Reports.

‡ Supplement to Registrar-General's 25th Report, pp. 4, 5.

In Sweden, the rate of mortality was, in the period from 1755 to 1776, one in thirty-four and two thirds,* and from 1855 to 1860 it was one in forty-two and nine tenths of the living population.†

The rate in Dublin was one in twenty-two in the beginning of the eighteenth century,‡ and one in thirty-eight in the middle of the nineteenth.§

Decrease of Mortality.

Mr. Griffith Davis, a learned actuary, and writer on vital statistics, in the London Assurance Magazine, says:—

"By laborious investigation, I have ascertained upon indubitable evidence that a gradual diminution of mortality has taken place among the inhabitants of this country [England and Wales] through the last hundred years, and, taking all ages together, out of the same population there were—

Period.	Annual Deaths.	Period.	Annual Deaths.
1720 to 1730	106	1780 to 1790	79
1730 to 1740	104	1790 to 1800	75
1740 to 1750	92	1800 to 1805	70
1750 to 1760	85	1805 to 1810	66
1760 to 1770	84	1810 to 1815	61
1770 to 1780	86	1815 to 1820	62

—so that the mortality has decreased two fifths from 1720 to 1820."¶

This is corroborated by the statement of Mr. Edmonds in the London Assurance Magazine,¶ in connection with the deductions from the Reports of the Registrar-General, which show that the average rate of mortality in England and Wales was, in the first forty years of the eighteenth century, three hundred and forty in ten thousand living, and in the last forty years, 1821 to 1860, it was two hundred and seven in the same population.

Nearer home we find similar evidence of diminished mortality. In Boston, from 1728 to 1752, the deaths were one in 21.65 of the living. In the twenty years, 1846 to 1865, they were only

* Price, Observations in Cyclopædia Americana.

† Sveriges, Officielle Statistik, Bevolkerung. Calculated.

‡ Price, Reversionary Payments, I. p. 256.

§ Registrar-General's Reports, 1864, 1865, and 1866, Ireland.

¶ Vol. V. p. 145.

¶ Vol. II. p. 408.

one in 42.08,—about half as numerous as a hundred years before.*

Expectation of Life.—Life-Tables.

The expectation of life, or the average time through which any number of persons will live, from birth or from any other age, is determined by calculation from the records of many people whose whole lives were subject to observation. Thus it is found and shown in Dr. Farr's Life-table, published in 1864, that of a thousand males born in England and Wales, though some may die in their first month and some at the end of a century, and the others at all the intervening ages, yet the whole sum of all their lives amounts to thirty-nine thousand nine hundred and ten years; which, divided equally among the whole, gives an average of 39.91 years for each; and this is their expectation of life at birth.†

In the same manner, the expectation of after-lifetime is determined from any other age; as, at twenty, a thousand will live thirty-nine thousand four hundred and eighty years; and at forty, the same number will enjoy a total of twenty-six thousand and sixty years; showing that at twenty the men of England may reasonably expect to live 39.48 years, and at forty, 26.06 years, longer.

The expectation of life at every age from birth to the extremity of human existence, is determined by the same processes of calculation; and thus we have the average of future longevity from every year, and the whole constitutes the life-table.

These life-tables are made in almost all civilized countries; and in some of them they have been made at two or more periods within the last three or four hundred years. In all cases, these life-tables are based on the facts of life and death, or the records of the observations of great numbers of persons who have lived and died in those countries, at and before the periods in which the calculations were made.

* Calculated from Mr. Shattuck's census of Boston, 1843, and recent mortality records.

† English Life-table No. 3, p. 36.

Life-Insurance and Annuity Companies.

It is the intention of the Life-Insurance Companies to receive so much in annual premiums, during the life of the insured, as, with the interest, will amount to the sum which they agree to pay at death to the heirs. It is therefore necessary that the calculated life, during which they are to receive annual premiums, shall not exceed the actual average of life from the age insured; otherwise they will receive payments insufficient to cover the amount to be paid to the heirs.

The Annuity Companies, for a certain amount received in advance, engage to pay back to the annuitant annually a certain amount agreed upon. For their security, it is necessary that the sum received should be sufficient, with the interest, to cover all the sums annually returned, through the life of the annuitant. It is further necessary that the calculated duration of life should be, at least, as long as the actual average; otherwise they will pay out more than they receive.

If the person insured live longer than the calculated average, he pays so many more premiums, and the company make it so much more profitable. If, on the contrary, he dies earlier, the company receive fewer premiums, and lose.

If the annuitant lives longer than the calculated term, the company pay him so many more annuities, and lose thereby. But if his life be ended earlier than the average, they save so many annuities, and make a profit on the contract.

The calculations in both companies being made on the average, and the business covering large numbers of persons of every age, the long lives which are injurious to the Annuity Office and profitable to the Life-Insurance Office are balanced by the short lives, which affect both of these companies in the opposite ways.

Both these classes of companies endeavor to have their life-tables represent exactly the average duration

or expectation of life from each year of age, and both are therefore safe, if they are correct in their calculations.

As the life-tables are intended to represent the actual average value of life at the time they are used for insurance or for selling annuities, it is needful that observations of the bills of mortality should be made anew from time to time, to adapt them to the actual experience of life and death. They may be therefore taken as evidence of the longevity of the people at the time they are used.

Taking, then, these life-tables, in their respective countries and at their respective times of observation, as the representatives of the value of human life, or of the average number of years enjoyed by the people from birth or from any specified age, they become valuable and available means of comparing the longevity of different periods of the world, and of different nations, with each other, whether contemporary or otherwise.

Ancient and Modern Longevity.

Comparing the longevity of people in earlier and in later periods of the world, as shown by their life-tables, we find another proof of the increase of human life with the progress of time.

According to the tables of Ulpian and the faith and practice of the Roman courts from the third to the sixth century, the average length of life granted to and enjoyed by all persons under twenty years of age was thirty years; that is, a thousand, taken as they are usually found, of all ages under twenty, — infants, children, and youth, — if observed until the last one died, were ascertained to have lived a total sum of thirty thousand years, or an average, for each one, of thirty years after the time of the observation.

Mr. Finlaison's calculations, based on the records of the lives of the annuitants of the British debt connected with the tontine of 1790, show that the average longevity of these people of Eng-

land was fifty years from and after all ages under twenty.*

According to Ulpian's tables, the average life of twenty-eight years was added to those who had already lived from twenty to twenty-five years. Mr. Finlaison showed that this additional boon was forty-one years and seventy days for the modern Englishman of the same age. In the next quinquennial period, — twenty-five to thirty years old, — the expectation of life was twenty-five years for those who lived in Rome in the third, fourth, fifth, and sixth centuries, and thirty-eight years and fifty-four days for those who lived in Great Britain in the eighteenth and nineteenth centuries.

Take another and later period of life, — fifty to fifty-five years of age. The Roman had a reasonable expectation of living thirteen years longer, and the Briton had twenty-two years and two months added to his earthly existence.

The comparison of the ancient Roman with the modern English extension of life from all other ages shows a similar improvement with the progress of the world.

The Roman tables were calculated from observation of the more favored classes, the rich, the cultivated; but the great mass of the people, mechanics, workmen, the slaves, and the poor, who have a shorter life, were not included.

At the present time, among all the people of England, including the poor as well as the favored classes, the expectation of life at the age from birth to twenty is, for males, over forty-five (45.74) years, and for females, forty-six (46.46) years; and at the age from twenty to twenty-five, it is thirty-eight years for males, and about thirty-nine (38.98) years for females.†

In the United States, according to the calculations of Mr. L. W. Meech,‡ of the Census Office, for all classes of males and for all parts of the country, this expectation is, from birth to twenty,

forty-seven years, and from twenty to twenty-five it is thirty-nine years and five eighths.

Here was an increase of longevity, from the beginning of the third century to the end of the eighteenth, of fifty per cent among the more favored classes; and, sixty years later, the life of all classes in England and the United States was fifty per cent longer than that of the best among the Romans of the earlier day.

Geneva.

There is a record of mortality, kept at Geneva, in Switzerland, for almost four hundred years.*

The expectation of life was, —

In the 16th century,	21.21 years.
" 17th "	25.67 "
" 18th "	33.62 "
1801 to 1833	39.69 "
1814 " 1833	40.68 "

That is, the whole sum of life granted, to a thousand persons, from birth to death, at whatever age, was twenty-one thousand two hundred and ten years in the sixteenth century, and forty thousand six hundred and eighty years in the nineteenth century, giving in the former an average of twenty-one years and one fifth, and in the latter an average of forty years and two thirds, and showing an increase of human life of nearly one hundred per cent in those three hundred years.

This improvement is mainly in the diminished mortality of infants and children. In the first period, one half were dead in their ninth year. In the last and present period one half lived forty-three years and one fifth. In the first period, only thirty-nine per cent of those who were born reached the period of maturity at twenty and entered upon self-sustaining and responsible life. In the last period, sixty-six per cent passed into the working period and became self-supporters.

In Sweden, the expectation of life at birth was, from 1755 to 1775, thirty-

* Edward Mallet, in *Annales d'Hygiène*, Vol. XVII.

* McCulloch, *British Empire*, I. p. 421.

† *English Life-table*, 1864, pp. 36, 38.

‡ *Massachusetts Insurance Commissioners' 13th Report*, Pt. II. p. cvi., 1867.

five years and three months; and from 1841 to 1855 forty-three years and five months.*

Fifty years ago, the Life-Insurance Company of Philadelphia used a table according to which this expectation was twenty-eight years and five months from birth.† The life-table of the United States, calculated in 1860, made it very slightly over forty-one years for males.‡

Professor Wigglesworth's table, made in 1789 on the observation of the mortality in Massachusetts, states the expectation from the tenth year to be thirty-nine years and a quarter.§ The table now used by the New England Mutual Life-Insurance Company makes the same to be forty-seven years and five months; and Mr. Meech's table for the whole United States, including the Southern and the new States, gives males at that age a chance of living, nearly a year longer than that given by the New England table.

In Holland, of ten thousand children ten years old, during the one hundred and twenty-five years, 1613 to 1738,|| five thousand six hundred and sixty-five survived to their fifty-first year. In the present century six thousand four hundred and forty-one lived to the same age.¶

English Tontines, 1693 and 1790.

The most remarkable and exact proof of the increase of human life during the hundred years from the first of the eighteenth to the first of the nineteenth century, is shown by Mr. Finlaison in his comparison of the results of the two tontines of the British government.**

In 1693, King William issued a tontine, a system of annuities, to be paid to the annuitants as long as they or any persons selected by them should live. In this contract, the sums that were to be annually paid by the govern-

ment to the annuitant bore a proportion to the sum originally received, according to the expectation of life of the person selected as the basis. As this expectation was based on observations of the length of lives at that period, it was a safe operation both for the government and the annuitants. The government borrowed sums of money of the annuitants, and repaid their principal and interest in annual instalments.

In 1790, William Pitt, prime-minister, issued another tontine, on the same basis of expectation of life, engaging to pay the annuitants annually the same percentage of that which they had paid in, during the lives of themselves or of the persons selected. This went on very well for a few years, but at length the government saw that the lives of these annuitants did not terminate so fast as did those of the former tontine, a hundred years before, and it was proving to be an unprofitable contract for the treasury, but a very profitable one for the other party. And, in 1830, the sale of annuities on this basis was stopped, for the people lived longer than they did when the calculations were originally made, in the seventeenth century; more annuities were paid, and the whole of these payments, before the lives of the annuitants should cease, would amount to much more than the sums originally received, with the accumulated interest. The government were thus paying an enormous and ruinous interest on the money they had borrowed in this way.

Mr. Finlaison's analysis and calculations showed that, while, under the age of twenty-eight, ten thousand of each sex had died in the tontine of 1693, only five thousand seven hundred and seventy-two males and six thousand four hundred and sixteen females had died in the tontine of 1790, in the same length of time. The mortality under the age of twenty-eight had diminished forty-two per cent among males and thirty-five per cent among females, during the hundred years.

It was shown that, from the age of thirty, the annuitants of the first tontine

* London Statistical Journal, XXV. pp. 126, 130.

† Seybert's Statistical Annals, p. 51.

‡ Mass. Ins. Commissioners' 13th Rep. 1867.

§ Sheet printed by N. E. Life Ins. Co.

|| Kerseboom.

¶ Statistisch Jaarboek, 1867, p. 406.

** Dr. Southwood Smith, in Trans. Brit. Social Science Assn., 1857, p. 498.

lived twenty-six years and eight months, and those of the second tontine lived thirty-three years and nine months; and the whole result is, that, within a century, one quarter was added to the life of the class of people who had thus loaned their money to the British government.

Change in Diseases and their Character.

Many of the dangers that beset humanity in former times have disappeared, or have been very greatly modified, and disarmed of their destructive power. The causes of sickness that robbed man of his strength, filled him with pain, or withered his life away, have been diminished in force and number, and many have been entirely removed. Diseases themselves have changed in their character, — some have become mild, some harmless, some have ceased to appear. Some, that formerly came as epidemics, and spread over and wasted whole districts, sweeping away multitudes in a single season, now appear only in a sporadic manner here and there, attacking individuals, but not whole peoples.

Records.

Although the simple facts of death have been recorded for a long period in many places and in several countries, yet the diseases or causes of death have been recorded in comparatively few. The fullest accounts are those of London, collected and published by Dr. Short, who quotes them from Corbyn Morris. They are copied apparently complete from 1675 to 1757, — a little more than eighty years, — from the original records of the parishes.

We have full accounts of the causes of death in London, through the last fifty years, and of England for near thirty years, and of many of the European nations for several of the late years, and of Massachusetts for twenty-six years.

These enable us to make some comparisons of the prevalence of disease in former and latter times.

Small-pox, which was almost con-

stantly present, and, from 1675 to 1757, destroyed seven to ten per cent of all the people in London, where the record was made,* is now almost entirely banished by the influence of vaccination. And in the ten years, 1851 to 1860, only about one per cent in London, and less than one per cent in all England, died from this cause.†

Measles was formerly very malignant and fatal: five, seven, and even ten per cent of all the deaths were due to this cause.* In the last twenty-five years, about two per cent of the mortality was produced by this disease.‡

Convulsions destroyed seventeen per cent, or one sixth, from 1675 to 1697; twenty-seven to thirty per cent, or more than one quarter, from 1701 to 1757, in London; § and in the thirteen years, 1848 to 1860, only three and ninety-four hundredths per cent.† In the last twenty-five years, in Massachusetts, less than two per cent died from this cause.‡

Fevers were formerly one great dread of the people, and with good reason. Nearly one sixth, — 15.94 per cent, — of the people in London perished from this cause in the last quarter of the seventeenth century, and nearly as large a proportion in the next fifty years.* But in the ten years, 1851 to 1860, this proportion was found reduced three quarters, — to 3.66 per cent of the whole mortality.† In Massachusetts the proportion is 5.46 per cent.‡

Teething of children destroyed more than one twentieth, — 5.9 per cent, — from 1675 to 1727; a slightly diminished proportion in the next thirty years*; and less than one per cent in the fifteen years, 1850 to 1865.

Consumption, the dread scourge of the present day, was more dreadful in the former ages of the world. In the seventeenth century, 17 per cent, and in the first half of the eighteenth century, 16.93 per cent, of all the deaths.

* Short.

† Supplement to Reg.-Gen. 25th Rep.

‡ Reg.-Gen. Reports.

§ Registration Reports.

|| Registration Report, 25th.

were produced by this cause.* But at the present time this proportion is reduced to 10.4 per cent in London, and to 12 per cent in England and Wales.†

Some other diseases, which are not known to the civilized world at the present day, prevailed with destructive havoc in the early and middle ages. Dr. Laycock, the learned professor of medicine in the University of Edinburgh, in the report of the Commission on the Health of Towns, gives much of the sanitary history of York and of other parts of Great Britain and Europe. He speaks of the "black death, a glandular typhus or plague, by which, it is calculated, twenty-five millions perished in Europe during the years 1348 and 1349. In the latter year, in the city of York, it raged furiously from about the Ascension to the Feast of St. James the Apostle. As in London, so in York, the common graveyards were insufficient for the interment of the dead."‡ Clyn, the old monastic annalist, referring to this pestilence, says:—

"It seized the city of Avignon, where the Roman court then was, and where the churches and cemeteries were not sufficient to receive the dead, and the Pope ordered a new cemetery to be consecrated for depositing the bodies of those who died of the pestilence; insomuch that from the month of May to the translation of St. Thomas, fifty thousand bodies and upwards were buried in the same cemetery,—the river Rhone."§

"That pestilence deprived of human inhabitants villages and cities, castles and towns, so that there was scarcely found a man to dwell therein. That year, 1348, was beyond measure wonderful, unusual, and in many things prodigious." "That pestilence was rife in Kilkenny in Lent. Scarcely one alone ever died in a house; commonly husband, wife, children, and servants went the one way,—the way of death. And I, Friar John Clyn, of the order

of Friars Minor, and of the Convent of Kilkenny, wrote in this book these notable things which happened in my time, which I saw with my eyes and which I learned from persons worthy of credit."*

The sweating-sickness made similar havoc among the people in those days of low civilization, sickness, and suffering. This was "an epidemic resembling cholera in all its most essential features; the only difference being that in one the skin and in the other the bowels were affected." It appeared first in England in August, 1485, "being imported, according to Hecker and preceding historians, by the Earl of Richmond's invading army. This, however, is doubtful. Hollingshead distinctly observes, that, in the year 1252, 'sweats, agues, and other diseases' prevailed in England after a dearth; a murrain among the cattle following in autumn."†

Kaye, a writer of the time, says of the sweating-sickness: "Some in one hour, many in two it destroyed, and, at the longest, to them that merrily dined it gave a sorrowful supper. As it founde them, so it toke them, some in wake, some in sleepe, some in mirthe, some in care, some fasting, some ful, some busy, some idle, and in one house sometye three, sometye five, sometye seven, sometye eyght, sometye more, sometye all; of the which, if the haufe in every towne escaped, it was thoughte greate fauor."‡

The parish register of York says: "Above one half of the estimated population of this parish was carried off in the two summers of 1550 and 1551." And, in 1609, the clerk again records in the register: "In this yeare was the greate plague in Yorke." The word "greate" must not be understood in any limited sense, as we now use it when speaking of prevalent or fearful sickness. "What would now be esteemed a very high rate of mortality was then

* Short.

† Supplement to Reg.-Gen. 25th Rep.

‡ Health-of-Towns Report, I. p. 250.

§ Clyn's Annals, quoted in Mortality Report, Vol. I. of Part V. of Census of Ireland, 1851, p. 86.

* Clyn's Annals, quoted in Census of Ireland, 1851, Mortality, Vol. I. p. 86.

† Health-of-Towns Report, I. p. 251.

‡ Quoted by Dr. Laycock, in Health-of-Towns Report, I. p. 251.

little thought of, so numerous were the causes of disease and death in the Middle Ages." When the plague was absent, the "purples" (petechial fever), small-pox, autumnal cholera, and exanthematous typhus were constantly rife. While these destroyed only one in ten or fifteen of the population, a "great plague" or "great visitation destroyed one in two or three in four."* Diseases were then so prevalent and fatal in ordinary years, that what now would be called very unhealthy seasons would then be esteemed highly favorable, and received with thankfulness. The seven-to-ten-per-cent rate of mortality was considered as the natural lot, and created no more alarm than a one-and-a-half to two-and-a-quarter per cent rate does at the present day. They were as grateful for the good years in which only a tenth or a fifteenth of the people died, as we are when only one sixtieth, fiftieth, or fortieth are carried away. They were aroused to fear and to taking measures for prevention when the epidemics spread thickly and widely and destroyed the people by thousands.

No Sanitary Measures adopted.

Even in the midst of this wide waste of death, the people took no pains to search out the causes of these pestilences; they only thought of contagion, and of endeavoring to prevent the spread of the disease from the persons and houses afflicted to those that were yet free from it. And though there were abundant sources of pestilence in their midst; though there were stagnant moats and pools; though there was no underground drainage, but superficial gutters filled with all sorts of filth, decaying animal and vegetable matters, and so choked that the water could not run off; though their houses were unswept and their inhabitants wore their clothing unwashed; though the air within and without was reeking with pestilential exhalations,—yet the people and the rulers took no note of these things. The wrath of Heaven, contagion, and sometimes the malice

of supposed enemies, were their especial objects of dread, which they endeavored to propitiate, or guard against and prevent.

Friar Clyn says: "This year, 1348, chiefly in the months of September and October, great numbers of bishops and prelates, ecclesiastical and religious, peers and others, and in general people of both sexes, flocked together by troops in pilgrimage to the water of Tachmoling, insomuch that many thousands of souls might be seen there together for many days. Some came on the score of devotion, but the greatest part for fear of the pestilence which raged at the time with great violence."* In other instances the Church ordered processions and masses, the people flocked to the churches, and some made pilgrimages to the shrines of the saints; and in all ways of devotion and prayer to the Deity, or to those who were supposed to have influence with him, they sought for relief from their dread destroyer.

The authorities, ignorant of the causes of the pestilence, made no efforts to prevent its first appearance or remove the causes of its extension, but bent their energies to preventing its spread by contagion after it had come to their people. The town-clerk of York leaves record of the doings of the town council in their days of trouble, one of which will show how they attempted to deal with this great adversary to human life in 1551:—

"vij die Maij anno iiii^{to} R. R. Edw. viith

"It was agreyd, that all the wardens in ther wardes shall generally take shuche ordre for saveguard of this cite, that all those whiche be, or hereafter shalbe, infectyd with the plaige, shall kepe their owen howses, and to be prepared for accordynglie. And if it forton any of them uppon great necessite to go abroad, then such as dothe goe abroad, shall have a white Rodd in ther hands thentent they may be knowen; and that every howse that is infectyd shall have a Rede Crosse

* Clyn's Annals, quoted in Census of Ireland, 1851. Mortality, Vol. I. p. 86.

* Health-of-Towns Report, I. pp. 253, 254.

sat uppon the Dower; and also that suche as departith uppon the plaige shall be buried uppon the day and not uppon the nyght: and further when any person is departyd, that ymmediatelie before the corse shalbe hadd to the buryall, the bell shall be knylded unto the corse be burried: and further that no dogges go abrode in this citie upon payn to forfait for every dogg that goith abrode vj.s. viij.*

In London, at the period of the epidemic in the beginning of the sixteenth century, it was ordered by the mayor that a red cross with the words, "*Lord, have mercy on us,*" be posted on the front-doors of all the houses wherein the pestilence existed, and all persons going out of such houses were required to carry a white rod two feet long in their hands.†

Besides these endeavors to propitiate Heaven and to prevent the spread of the pestilences, the people seemed to suspect that there might be causes of these diseases, but these causes were the wickedness of their fellow-men. "In 1348 they thought that the wells and springs had been poisoned, and thousands of Jews were slain with fire and sword as the poisoners, in conjunction with hundreds of Christians, their supposed accomplices."‡ In the weak philosophy of those days it was easy to cast odium on, and stir up popular wrath against, unpopular persons, like the hated Jews or others, as the authors of all this wide-spread disease.‡

But there was one philosopher at that time who saw the nature of the pestilence and the cause of its origin. Caius, or Kaye, in his "*Boke or Counseill against the Disease commonly called the Sweate or Sweating Sicknesse,*" says: "The v. cause is close and vnstirred aire, and therefore putrified and corrupt out of old welles, holes in y^e ground made for grain whereof many I did se in and about Pesaro in Italy, by opening the afre a great space, as both those coutrimē do cōfesse, and also

by exāple is declared for y^e manye in openig the uhwarely be killed."*

Good counsellor Kaye preached in vain; the people gave dull ears to his advice. The dirty places remained uncleaned, the streets were not drained, the sources of disease were not closed. The cholera broke out in 1832 in the very spot where the plague and the sweating-sickness first appeared in York, three or four hundred years before, and typhus has had for centuries its favorite haunts undisturbed, and it has them now in some towns where typhoid diseases prevail and early death is the general law among the people.

The Plague.

The plague is to us but a matter of history, and few have now any conception of its power. It was a dreadful and present reality in the earlier ages of the world, and the most terrible scourge in Europe and in the East.

In London,† of which we have the full records, the average annual mortality was from five thousand to six thousand for some years previous to 1602; when the plague appeared, and there were forty-two thousand and forty-two deaths in the city in that single year, of which thirty-six thousand two hundred and sixty-nine were from this epidemic. From an average of about twelve thousand, previous to 1625, again the mortality increased, and fifty-four thousand two hundred and sixty-five died in that year, thirty-five thousand four hundred and seventeen from the plague.‡ Again, forty years later, in 1665, this epidemic appeared, and carried the mortality up to ninety-seven thousand three hundred and six, of which sixty-eight thousand five hundred and ninety-six were from this single cause.†

No record tells of the mortality from plague previous to 1602. But in all the period from 1602 to 1665 it had its ceaseless work, destroying from one thousand to ten thousand and four hundred in each year.†

* Health-of-Towns Report, I. p. 252.

† Laycock, in Health-of-Towns Report, I. p. 254.

‡ Ibid., I. p. 263.

* Quoted by Dr. Laycock, in Health-of-Towns Report, p. 262.

† Webster, Epidemics, II. p. 3.

The plague made similar havoc in Dresden, Saxony, multiplying the mortality in some years five or six fold by its destructive presence. The same results are shown by the records of other towns where it was most prevalent and fatal.

From the earliest times, through the Middle Ages, it has appeared in the several countries of Central and Southern Europe, — Germany, Holland, England, France, Portugal, Spain, Italy, Turkey, Russia.

The records tell us of fifty-seven great pestilences that appeared, and greatly ravaged some parts of the world, from the time of Christ to 1789. In one of these, in 1656, two hundred and forty thousand are estimated to have perished in the city of Naples, and four hundred thousand in that kingdom.*

The cities were the especial haunts of the plague. They were then unpaved, undrained, and unswept, and the streets were the receptacles of all the filth of houses, shops, and barns, and pestilential air pervaded street, dwelling, store, and working-place, and the people were inevitably breathing

deadly exhalations and the causes of sickness.

Now, for near two hundred years, the plague has disappeared from Great Britain, and mostly from the central and northern parts of Europe. It still occasionally visits Turkey, Egypt, and Asia, where civilization has not yet removed its causes.

Other Diseases less virulent and destructive.

In the progress of the world from infancy to maturity, the foes of human life have diminished and its friends have increased. Epidemics, pestilences, plagues, and malignant diseases have been gradually disarmed of their destructive power, and some have entirely disappeared; and many others, — fevers, small-pox, measles, scarlet-fever, etc., — have become comparatively mild and rare, and man has less to fear in his work and his walk through his present stage of being. Moreover, his constitution is better developed and sustained, for reasons that will appear in the succeeding articles; and thus man's life is more effective and enduring.

* Webster, Epidemics, I. p. 306.

AT RYDAL.

ONCE seemed it possible to know
The wisdom shut in printed books;
And once, to paint the fleeting glow
That gilds the woodland brooks:
But each must see a higher height
Who strives to conquer Wisdom's steep,
And each discern a peerless light
The pencil cannot keep.

The shadowy feet on Rydal Mount
Lead upward from a simple grave,
And ever travel toward one fount,
And follow but one wave:
Follow the sacred stream of Love;
What worth, Ambition! What hurt, Scorn! —
If fall the loving tears above
One who to Love was born?

A DREDGING EXCURSION IN THE GULF STREAM.

WE had arrived in the harbor of Havana on the 24th of February last, with the intention of leaving almost immediately on a cruise, the chief object of which was to make deep-sea soundings along the northern coast of Cuba and on the Bahama Banks. The steamer *Bibb*, of Coast-Survey renown, honorably known both in times of peace and times of war in almost every port of our Atlantic coast, was punctual to her appointment, and met us on the morning of our arrival. Transferred to her comfortable quarters, cordially welcomed by her captain and officers, and with the stars and stripes above us, we felt that it mattered little to us personally whether the city of Havana was in a state of siege, as the *New York Herald* reported it on the day of our departure, or whether it was, as we actually found it, as quiet as a *New England Sunday*, with no other indication of disturbance than its unusual stillness, — perhaps like the dead calm which precedes one of its own tornadoes.

Before starting on our exploration, however, there were certain official preliminaries to be settled. In the existing state of political disturbance, when every strange vessel was looked upon with suspicion, it was thought best that Mr. Agassiz should see the Captain-General and request the permission (most graciously granted, by the way) to make surveys in Cuban waters and enter any Cuban ports unmolested. This matter settled, we should have sailed immediately; but the work of sounding and dredging is peculiarly the sport of the winds and waves; nothing can be done in a rough sea; and an obstinate "norther" now set in and held us unwilling prisoners for several days.

All the amusements which usually make Havana so gay were interdicted. There was nothing to do but to talk over the insurrectionary news, to watch

the going and coming of troops, or to drive occasionally around the city or out to the Botanical Garden, — excursions of any length into the country being considered unsafe. The Botanical Garden is said to have been well kept formerly, but it is now in a state of complete neglect; the tanks and artificial streams dried up, the water-plants decaying, the growths tangled and ragged. The Alley of Palms remains its most beautiful and characteristic feature, but it does not compare in height and grandeur with that of the Botanical Garden in Rio de Janeiro.

At night, sitting on deck, we watched the wonderful phosphorescence of the harbor. So luminous was the water that every living thing within it was visible. We could count the rhythmical pulsations of the jelly-fishes by the rise and fall of a dim silvery glow which surrounded them; we could track the swift dart and whirl of the shrimps by sudden flashes of light; and every now and then a large fish coming to the surface would scatter a glittering foam for a yard and more around him. Every little boat carried its trail of light, and scattered golden spray from its oars. On examination the water was found to be full of animalcules, which are no doubt the chief source of the light, though it is partly due to a less pleasing cause, namely, the rapid decomposition of animal matter in the harbor. This accounts for the diffuse and spreading but duller glow which mingles with the more sparkling and vivid light.

At last, after a few days' delay, we were off, with a favorable wind and a smooth sea, skirting the northern shore of Cuba, dredging and taking soundings as we went.* The dredge was

* *Wishing to give as impersonal a character as possible to this little sketch, I speak of the work in general terms, but it may not be amiss to say a word, in the outset, of the division of labor. Mr. Agassiz's share of the work, in connection with his friend M. de Pourtalès, whose previous investigations in the*

thrown for the first time some ten or fifteen miles east of Havana, at about two and a half miles from land, in four hundred and sixty-five fathoms of water. I confess that when the dredge was first thrown over the side of the vessel, I waited for its return with the impatience and curiosity of a novice, saying to myself, "What will it bring us from the deep sea?" Little or nothing this time but the dead. Yet its contents were not uninteresting. Of the pretty transparent shells of the Hyalaea, like or little bubbles of blown glass, purple or brownish in tint, there were four species; there were white Atlantas (Heteropods) resembling minute Nautili in appearance, though quite unlike them in structure, and a little Cleodora, formed like a three-cornered beech-nut, but pure white in color; besides these there were the wrecks of barnacles (Lepas), some joints of a coral (Isis), and a Cuvieria. But of living things there were none except a marine worm, and a hermit crab protruding his bright red claws from the tiny shell where he had made his home, little thinking to be disturbed, at least by any fishermen of the upper world, this peaceful morning, some two thousand feet below the surface of the sea. The next time we were more successful, the dredge being thrown in nearly the same locality but in shallower water, — the sounding giving only one hundred and fifty fathoms. It brought up living Gorgonias* (Fancorals), their delicate branches of a pale rosy hue, the stem here and there thickened by the growth of a small sponge upon it. As it lay in the glass bowl, separated from the mass of things which came up in the dredge, the different members of this pretty compound coral were in every degree of contraction and expansion. Seen through the lens, they were singularly like the buds of the Calmia (mountain laurel). Across

kind have given most valuable results to science, was simply to direct the dredgings. Captain Platt, the present commander of the Bibb, was continuing a hydrographic survey on the Florida Reef and neighboring coasts, which has been ably conducted by him for several years past.

* *Acanthogorgia*.

this branch rested a bit of glass-coral (Hyalonema), transparent, and hollow like a broken pipe-stem. Besides these specimens there were minute Crinoids, the crown not more than an eighth of an inch in length, Feather-stars, Terebratula, stalks of Isis, Sertularians in plenty, and also a bit of glass-coral growing from a little sponge. And so, with varying fortune, we kept on our way, stopping at short intervals to sound and dredge; sometimes with no return at all; sometimes only a broken net with a few small fragments of coral hanging to the frame of the dredge, telling us that perhaps we had lost some large coral mass which would have been a treasure, but which was heavy enough to burst the meshes in which it was caught. In this work there is many a slip between the cup and the lip: a strong current, an adverse wind, a rough sea, any untoward incident, however slight, is enough to disturb the apparatus and make success impossible.*

A word about the apparatus itself may not be out of place. The dredge is a strong net about a yard and a half in length, surrounded by an outer bag of sail-cloth. Both are open at the bottom, but laced above around an oblong frame of iron. This frame has two arms, with a ring at the end of each. One of these arms is securely fastened to the line by which the dredge is let down; but the other, instead of being attached to the line, is simply tied by a weaker cord to the first. This is in order that, in case the dredge should be

* Dredging in great depths is a slow and rather tedious process, requiring not only patience but very accurate observation. M. F. de Pourtales, of the Coast Survey, has been engaged on board the Bibb for the last three years in making dredgings in the Gulf of Mexico. These dredgings have included every variety of depth, from the shore outward to soundings of six, seven, and eight hundred fathoms, eight hundred and sixty fathoms being the deepest. They have brought to light the most astonishing variety of tiny beings, — especially crowded on rocky bottoms, but not altogether wanting even in the deepest mud deposits. A report of the results obtained in his first two years' dredgings has been partially published by M. de Pourtales in the Bulletin of the Museum of Comparative Zoölogy at Cambridge. They form a most valuable contribution to our knowledge of the animals existing in the deep sea.

caught on the bottom, as often happens, one of the arms may give way, allowing it thus to change its position slightly and be more easily freed. It is an important precaution; for sometimes the dredge is caught so fast that it requires not only the force of the small engine to which the reel, holding seventeen hundred fathoms of line, is attached, but the additional strength of all hands on board, to disengage it. When the dredge is lowered,—being of course weighted, so as to sink rapidly,—a cord is tied around the bottom of the net, while the sail-cloth is left open; thus allowing the free escape of water from the former, while the sail-cloth protects it from injury. When the dredge is landed on deck, a tub or bucket is placed under it, into which all its contents fall the moment the cord around the bottom of the net is untied. Sometimes a large tub is filled at one dredging with all sorts of living specimens,—shells, corals, shrimps, barnacles, sea-urchins, starfishes, polyps, sponges, and sea-weeds, with all their natural brilliancy of tints.

On the second morning, having passed Matanzas in the night, we found ourselves off Cruz del Padre, a lighthouse station situated on a part of the coast where islands and shoals make navigation dangerous. The day before, the shore had presented a gently rising slope, consisting, so far as its geology could be made out with a glass from the deck, of marine dunes consolidated into a conglomerate limestone. Behind this was a broken picturesque range of hills. But now we were anchored in front of a line of low, flat islands like the Florida Keys, divided from each other by open channels. Midway between our ship and the islands was a coral reef, invisible to me, but revealed at once to the initiated by a dark purplish band in the water. Immediately after breakfast the boat was manned, and we started for an exploration of this reef.

It was a delicious morning, with a light breeze stirring which made the heat endurable. As we approached the reef, coming into comparatively shoal water, its beauty gradually unfolded. The

water itself, wherever it flowed over a sandy bottom, was of a wonderful color, like the green of an emerald when the light strikes into it and gives you its palest, purest tints. A few more strokes of the oar brought us immediately over the reef in a depth of three or four feet—and it would indeed be difficult to describe what we saw. Here and there upon the floor, which lay spread out beneath us like a picture, were huge coral heads, each one a world in itself. Lovely sea-anemones were growing upon them, two or three inches in diameter, with all their plummy green tentacles fully open and softly stirring in the water. By their side were tiny sea-fans, not more than a finger in height, while others much larger, purple, rosy, or green, might be seen at various distances. I had always heard of the beauty of the living world under these transparent seas; but I had no conception that it would be so absolutely clear and distinct. We had with us a water-glass, which seemed to bring the bottom still nearer. It is nothing more than a square wooden tube, with a glass plate in the lower end. Sinking this under the water and looking through it, all the undulations of the surface, which distort objects below, are lost, and nothing obstructs the vision. Seen through this simple apparatus, the seabottom, or rather the summit of the reef above which we were floating, was like the most exquisite aquarium, the contents of which were ever shifting. We could see numberless little fishes swimming in and out between the blades of the sea-fans; among them the bright-colored parrot-fishes, their vivid blues and greens coming out in strong contrast against the white coral sand. But while I looked and admired, the collecting was going on. P—, who is an old hand at the work, and had come in what he calls his diving-costume, plunged over the side of the boat and walked off up to his waist and presently up to his neck in water, striding about as much at his ease as if he had been on land. Every now and then he disappeared with a sudden dive, nothing but an oc-

casional view of his heels, or his hat floating, innocent of a head, somewhere in the neighborhood, giving any idea of his whereabouts. From these submarine excursions he usually issued like a very sea-god, bearing perhaps an enormous head of coral, some two feet in diameter, which he had dislodged with an iron crow-bar carried in his right hand. Staggering to the boat under his heavy load, presently he was off again, returning from time to time with ever new treasures, — great cups of the Madreporæ; huge masses of *Mæandrina*; bunches of the crimson *Stylaster roseus*, a bright red coral growing generally on dead coral rock; fragments of *Mammillaria*, of *Porites* and countless other corals, some already known to Mr. Agassiz, others new. Our young friend G—— followed him, and was also busy in collecting; while the boatmen, catching the fever, plunged into the sea, or with a net tried to entrap whatever came along. In the mean time the Professor remained in the boat, and, aided by the captain, examined and stored away the specimens which arrived almost too fast to be properly cared for. They broke up some of the larger masses of rock, and found them full of life. Besides the corals of various kinds growing over their surface, the interstices were full of animals. Sea-urchins and star-fishes, frightened by the commotion, crept out of their holes and offered themselves to the spoiler. Worms, so long that you wondered where their soft folds were hidden in what seemed solid rock, uncoiled themselves and dropped from secret recesses. Little crabs scuttled away, but were caught as they made their escape, and imprisoned in one or another of the jars or buckets standing in the bottom of the boat and now nearly full. At last, after passing a couple of hours on the reef, we rowed to the shore of the nearest key. Here was a protected harbor between the reef and keys, which we looked at rather longingly, thinking, were there only a channel deep enough for the Bibb to cross the reef, how comfortable an anchorage it

would make in case we should be caught by a "norther" outside. The shore presented nothing but a beach of coral sand, and a low shrubby growth coming almost down to the water's edge.

We returned to the ship, laden with treasures; and, once more at home, the naturalists were very busy assorting their specimens, and, after watching them awhile in their living condition, preserving the smaller ones in alcohol, and disposing the larger coral heads and fans on the deck for drying. The *Mæandrina*, or Brain Coral, is one of the most beautiful. The bleached specimens exhibited in museums give no idea of its appearance when living. Between all the ridges which make the undulations, so familiar to us in the dead coral, the furrows are filled in with a green floor, soft as velvet, delicate as moss. In this green floor the mouths of the different animals are set, surrounded by tentacles of the same color, outside of which, like a paler row of tentacles surrounding the first, are lasso cells, their internal coils being plainly visible with the lens. Outside of these soft parts are the waving brown ridges which border the furrows, and by their winding contour give this coral its resemblance to the human brain. There are other species, in which the filling of the furrows is gray; but those with the green floors are much the prettiest. We brought home many fragments of *Porites* also. It seemed a pity to take them from the sea, where their greenish-yellow tufts look so soft that one can scarcely imagine them to be hard and rigid in structure. When placed in deep bowls filled with sea-water, they soon recovered their beauty however, and we could watch the twelve tentacles, which form the summit of every member of such a community, creeping gradually out till each one had its crown. So also with the Madreporæ: they folded in all their soft parts when taken from the water, but, being restored to their native element, began to expand again; the tentacles, which in this species are divided into six smaller and six larger ones,

being fully extended in some, though only partially visible in others. Many of our specimens borrowed brilliancy from a crimson growth around the base, which we supposed to be sponge.

From Cruz del Padre we crossed in a northeasterly direction to Salt Key Bank, an extensive and very level rocky shoal, coming to the surface only here and there. We anchored, the next morning, off Double-headed Shot Key, or Elbow Key, as it is also called, a narrow ridge of dangerous rocks on the northwest corner of this bank. Here our good fortune in the way of weather deserted us; heavy clouds to the north had given us unpleasant warning the night before, and the "norther" now began to blow in earnest. Notwithstanding the high wind and rough sea, we went on shore, after breakfast, in a boat. No beaches fringe these steep rocks, which turn a vertical wall to the sea, but a flight of steps cut in the stone gave us easy access to the land, and here the lighthouse-keeper met us, with his family. This barren strip of rock, swept by the sea, where not a square yard of soil has foothold, is a home. Anchored in mid-ocean, sometimes not seeing in the space of three or four months a soul beside each other, there live here a man and his wife, with a family of bright intelligent children. I could not but pity the young people growing up in such strange solitude and in such dreary scenes. Even walking with much pleasure is denied them. Elbow Key is a ridge of rock, about fifty feet above the level of the sea in its highest part, some quarter of a mile in width, and perhaps a mile in length; the surface is so broken, cut, and gnarled in every direction, that walking upon it is not unlike walking over broken bottles. It is worn also into deep pot-holes, into which you are constantly in danger of falling, and in many places is pierced through its whole thickness by deep caverns and tunnels. Kneeling on the edge of these singular excavations, which are often at a considerable distance from the shore, you see the water boiling

and surging beneath you, and hear the moaning of imprisoned wind and wave, while every now and then a blinding eddy of spray is forced up into your face. The wife of the lighthouse-keeper told me that when she first came there, six years ago, these strange subterranean noises possessed her imagination; combined with the raging of storm and sea without, they added a mysterious element of terror to the situation. Now, she said, she was accustomed to them. I suggested to her that she might have some little garden ground, to give occupation to the children and cheerfulness to their home. "Garden!" she exclaimed; "why, ma'am, if one of us should die, there is not soil enough to dig a grave, unless for my little two months' baby here." It was a rather ghastly, but very expressive way of putting the case. This man receives from the English government for his services here about four hundred dollars a year, and his rations, consisting, they told me, of little besides salt meat and potatoes. They complained bitterly of the want of books. They said that to most lighthouses, especially in such lonely situations, a library was attached, and they had petitioned for one, but without success. We had taken on shore with us a few books and papers, which they received with hearty gratitude. Indeed, the Bibb and her officers were old friends to them, the vessel having been anchored on the same spot, a year before, for a few days.

We walked over a great part of the island, sitting down from time to time to watch the breakers as they drove in upon the rocks and broke in clouds of spray against them. The strip of rock on which the lighthouse stands is separated from the rest of the ridge by a narrow channel. The whole ridge consists of rounded masses, in some parts only slightly lifted above the sea level, at others rising from twenty to thirty and fifty feet in height. The geology is curious. The whole key is formed of limestone, the strata dipping at various angles in different directions; but the surface is, as I have said, worn in many

places into pot-holes, which have again been filled by more recent formations, and these in their turn eaten away, leaving a mere shell lining the original excavation. In Mr. Agassiz's notes, taken on the spot, he says: "Double-headed Shot Key is a long, crescent-shaped, rocky ridge, of rounded knolls not unlike *roches moutonnées*, at intervals interrupted by breaks, so that the whole looks like a dismantled wall, broken down here and there to the water's edge. The whole ridge is composed of the finest oölite, pretty regularly stratified, occasionally torrential, the stratification more distinctly visible where the rocks have been weathered at the surface into Karren. The uniformity of the minute oörites leaves no doubt that the sand must have been blown up by the wind and accumulated in the form of high dunes before it became consolidated. The rock is very hard, ringing under the hammer, and reminds one of the bald summits of the Jura, such as *Tête de Rang*, near *La Chau-de-Fond*."

The next morning, Sunday, the 7th of March, neither wind nor sea gave any indication of subsiding, and as it was not worth while to cross the Gulf to the Florida Reef in weather which precluded all possibility of sounding or dredging, Mr. Agassiz proposed to Captain Platt that we should run down to Salt Key, about fifteen miles to the south of Elbow Key, that he might have an opportunity of taking another geological ramble, and comparing the formation of the two keys. To this the captain readily acceded, and we started forthwith; but as it happened we found there was a Sunday's work before us very different from that we had projected. We were well on our way, when the captain with his glass thought he descried a schooner aground, on a shoal called the *Lavanderas*, to the east of Salt Key. Determining to go at once to her assistance, he changed his course, and, in about an hour from the time she was first seen, we were alongside of her, or at least as near as it was safe to go. There

she was, — a fine schooner fast in the rocks, and likely to be knocked to pieces on them before long with such a sea as was now running. A boat was despatched to her immediately; and to me, who am but a land-lubber, or at least an ardent land-lover, her course looked perilous, — bobbing up and down like a cork, lost in the waves one minute, and half out of water the next. Having reached the vessel, a rope was thrown to her, and she was drawn near enough for the captain to jump in. He came off to consult with Captain Platt as to what was best to be done under the circumstances. He was bound from New York to Havana, in the schooner *Americus*, and had had a prosperous voyage until the preceding evening, when in attempting to cross the Bank he had run upon the shoal a little after sunset, and had been lying there all night. He knew the position of the *Lavanderas*, and had taken his course so as to give them a wide berth, but had been unconsciously drifted astray by one of the treacherous currents which are the seaman's dread in these waters. Since the schooner struck, a Spanish wrecker had been hovering about her, but the sea was so rough that she could not come near enough to render efficient assistance; and indeed the only help she offered was to lighten her of her cargo of potatoes, charging for the service seven hundred dollars, which naturally enough the captain declined to give. She had now retreated, and was anchored under the shelter of Salt Key. Captain Platt advised throwing overboard at least a part of the cargo, and then, with all sail set, trying to drive the schooner over the shoal. He sent the captain back in our boat, with as many men to help in the work as he could spare, and presently the sea was strewn with barrels, hogsheads, and boxes of all shapes and styles. She was laden with cement, potatoes, empty hogsheads to be filled with molasses at Cuba, lumber, and other miscellaneous matters. Lightened of her load, and the sails set, she began to give signs of life; she

stirred, changed her position a little, and after a few moments of suspense, floated and moved on.

There was an exclamation of delight from all the watchers on our deck, but they were presently checked; for, as she passed us, so close that the two vessels almost touched, we saw that her rudder was gone, and the boat returning with part of our men reported that she had large holes in her bottom, and was filling fast. Meanwhile, under full sail, she was moving off rapidly, somewhat to our anxiety; for who can tell at what moment or how suddenly a sinking ship may go down, and she had not only all her own people on board, but four of ours. We got up steam, and followed in all haste. Again within hearing distance, by means of much calling through speaking-trumpets till both captains were hoarse, the master of the schooner made it understood that, notwithstanding his crippled condition, he intended to keep on to Havana. "How can you," shouted Captain Platt, "without a rudder?" "I'm going to hang my rudder," was the answer; "stand by me while I do it." "But your rudder's gone, look over and see for yourself." Up to this moment he had supposed his rudder only unhung; but having satisfied himself that it was actually lost, he accepted Captain Platt's offer to tow him under shelter of Salt Key, and there see what might be done further.

The day was already far gone, and, having secured the crippled vessel to our own by a hawser, we proceeded to our anchorage. It offered little shelter, being only a roadstead deriving some little protection from the low, barren island which served as a sort of break-water against the force of the sea. Consequently, we tossed about, almost as if we had been in the open ocean. Once at anchor, Captain Platt sent a boat again to the *Americus*. He would gladly have taken all her crew on board at once, and had indeed but little hope that she could last till morning. The master of the schooner, however, still held to the resolve not to abandon his

vessel except in the last extremity, and intended to pass the night in the attempt to rig a new rudder. He hoped to keep down the water by means of the pumps; and, should she be afloat in the morning, he would still attempt to reach his destination. Captain Platt promised to stand by him during the night; and having done all in his power to help him while the daylight lasted, he agreed with the captain of the *Americus* that, should the disabled vessel need assistance before morning, she should run up a red light.

It was a rough night; the wind was loud, and all the noises which sound alarming at sea in the ears of the uninitiated were abroad. I confess that I was not insensible to their influence. It was still dusk when I heard one of the men come to the captain, who was lying down in the adjoining cabin, and tell him that the red light was up. He was out in a minute, and, as it was impossible to lie there and think of the sinking ship, I followed as soon as I could to the deck, where all our company were already assembled. The poor schooner was plunging head-foremost into the sea, the water breaking violently over her forward decks, and in the dim light we could see two or three of her crew, aided by our own men, still moving about her, trying to save instruments, papers, charts, and such personal effects as might be rescued at the last moment. But she sank faster; one by one the men dropped from her stern, which was still out of water, into the boats below, and at last the captain, not too soon, followed them. They rowed off, but, before they reached the *Bibb*, the *Americus* staggered over, and lay upon her side with the surf breaking across her. It was a sad sight to see. She looked so like a living thing, and she seemed to fight so hard for her life, struggling with the waves to the last minute! Indeed, the whole scene was dreary in the extreme. The sun was rising, but without glow or color, shedding only a gray, cold light over the waste of waters and the slowly dying wreck. How-

ever, we could not be too thankful that no lives were lost, and the rescued men themselves seemed to feel that they had more cause for gratitude than despondency, remembering what might have been the end had they remained on the shoal another night.

During the rest of that day, and the following night, we lay off Salt Key, awaiting the repair of our rudder, which was found to be badly split. In the mean time we had a dredging or two, not very rich in results, and Mr. Agassiz went on shore with a party from the ship, to examine the key. His notes give the following report:—

"The whole formation known as Salt Key Bank, and lying between Double-headed Shot Key, Salt Key, and Anguilla Key, is a level bank covered by from four and a half to six fathoms of water flowing over a fine sandy bottom. This sand is a result of the decomposition of corals reduced to oölites of various diameters, from fine powder to coarse sand, mingled with broken shells, among which a few perfect specimens are occasionally found. Upon the edge of the bank, which everywhere dips very abruptly and steeply into deep water, there are at several points rocky ridges, and at others sand dunes rising above the sea level. A close comparison of these formations shows, however, that they are only different stages of the same process, representing various degrees of progress in the accumulation, consolidation, and cementation of the same materials. On the flat top of the bank, that is, on the level surface lying between the islands or keys, and completely under water, the loose materials are pounded down to fine sand. In course of time this sand has been thrown up upon the shoalest portions of the bank, these shoaler portions lying upon its very edge, along which coral reefs have been formed. These coral reefs have thus become the basis for those parts of the margin of the bank which are now lifted above the water, as Elbow Key, Salt Key, and Anguilla Key. It has occurred to me—

though my data are too few to form the basis for a positive result—that in this bank, with its marginal islands, we see the beginning of something corresponding to the Athols of the Pacific Ocean. Should the growth of the reef, in the course of time, lift the whole edge of the bank above water, as it has already done in some places, the enclosed area would then be surrounded by a ring of dry land, similar to the circular coral islands enclosing quiet waters in the Pacific, the formation of which has been so admirably described by Darwin.

"The foundation rock resulting from the accumulation of loose materials above these reefs consists of a conglomerate of coarser oölite, rounded fragments of coral or broken shells, and even larger pieces of a variety of corals, and of '*Strombus gigas*,' the larger conch-shell. The latter are so numerous that they give great solidity and hardness to the rocks. All the species are those now found living upon the bank, among which the *Strombus* is the most common. Among the corals, *As-træa*, *Siderina* and *Mæandrina* are the most prominent ones. The stratification is somewhat irregular, the beds slanting toward the sea at an angle of about seven degrees. Above this foundation rock immense masses of loose *Strombus*, dead shells, and corals have been thrown in banks or ridges, evidently the beginning of deposits similar to those consolidated below. There is, however, this difference between them; namely, that while the foundation rock is slightly inclined and never rises higher than the level of high-water, the loose materials thrown above the water level are heaped in steeper ridges, varying from fifteen to twenty or even thirty degrees in slope. These ridges are due to the action of high tides and unusual storms. In Salt Key they make a foundation for the accumulation of finer sand driven over them by the wind, and forming high sand dunes held together by a variety of plants, among which a trailing convolvulus (*Batatas littoralis*), various grasses, and shrubs are the most conspicu-

ous. These dunes rise to nearly twenty feet in height. On their leeward side, almost to their summit, there grows a little palmetto. The sand of the dunes is still loose, though showing here and there a tendency to incrustation at the surface. Their slope is rather steep, sometimes over thirty degrees, and steeper to the seaward than on the landward side. In the interior of Salt Key there is a pool of intensely salt water, the surface of which has a pinkish or flesh-colored tint, due to the immense accumulation of a microscopic alga, and is hedged all around with the purest white foam. Along the outer edge of the area occupied by this microscopic plant, it forms large cakes not unlike decaying meat, and emitting a very offensive odor. The foundation rock of this key corresponds exactly to what Gressly has described as the 'facies corallien' of the Jurassic formation, while the deposit in deep water, consisting of muddy lime particles, answers to his 'facies vaseux.'

Having completed the work as far as the weather would allow at Salt Key, and the rudder being temporarily repaired, the captain determined to return to Elbow Key. He had lingered at Salt Key, partly in the hope of giving the master of the schooner an opportunity of returning to the wreck, which still lay with her masts above water, in order to cut away the sails and such of her rigging as he could save. Her captain was also partly her owner, and we felt the strongest sympathy with him, for the vessel was not insured and the pecuniary loss was total. But the sea was so rough that it was unsafe to approach her, and the Bibb rolled and tumbled about so uncomfortably that it was thought best to seek a more quiet anchorage.

As we approached Elbow Key, on our return, the scene was picturesque and beautiful. Both wind and wave had moderated now, but the "norther" of the last two days had blown up a furious surf. On the farther side of the key the waves were rolling in magnificently; breaking over the very summit

of the ridge, they poured down in foaming cascades to the sea. The caverns, or spout-holes, as they are called, were throwing out white columns of spray, rising perhaps some twenty or thirty feet into the air. They seemed to start from the very rock, for many of the openings from which they issued were almost at the top of the ridge. There were three placed so close together that the same rise and fall of the sea affected them simultaneously, and their three jets of foam rose at one moment, often meeting and mingling before they fell. Even where we were anchored, half a mile from the shore, we could hear the booming and roaring of the surf in these holes. Before night the clouds cleared away, the sun came out over the glittering spray, and the sea took on a mantle of many hues, changing from green and blue to softest amethyst and purple.

The afternoon was not lost for work. As the swell had subsided considerably, half a dozen fishing-lines were rigged, and we caught a number of fish which seemed to have borrowed their brilliancy of color from the sea. Meanwhile Mr. Agassiz and Mr. Pourtales dredged from the deck and brought up a variety of specimens, — a little cuttle-fish not more than a quarter of an inch long, with bright spotted body and black eyes ringed with gold; feather-stars of various colors, little scarlet crustacea, a minute sea-urchin hidden away in a bit of coral rock, exquisite rose-colored hydroids growing on a crimson base: such were some of the treasures we found off Elbow Key; farewell gifts as it proved, for the next morning we bade it good-by and started for the Florida Reef.

The sounding and dredging were continued at intervals all day. The first dredging to the west of Elbow Key, in three hundred and fifteen fathoms, gave as rich a harvest as we had had at any time, including exquisite living corals, growing not in communities but singly. Perhaps the most beautiful of all was a "*Desmophyllum*." Of these there were several, their white cups, very slightly tinged with rose at the

base, tapering to a delicate stem. They resembled small morning-glories, and looked, indeed, more like flowers than like animals. The tentacles were of a rich chocolate brown, and lay at first folded against the inner surface of the partitions; but when extended they stretched beyond the margin of the cup, and their soft feathery edges moved gently in the water. There were other corals in this dredging, also single, and almost as pretty as the "*Desmophyllum*," though smaller. I observed especially the *Thecocyathus*, — the cup about the size of a pea, white outside, salmon-color verging on orange within. One was delicately mounted on a small shell, the prettiest thing to see in the world. Then there were very minute sea-urchins, the disk not more than the fifth of an inch in diameter, but the spines three times that length; crustacea of various kinds and very brilliant hues; star-fishes, especially ophiurans, and countless other dwellers in the deep sea.

That night we anchored in the quiet waters of Ship Channel, between the reef and the Florida Keys, and the following day about noon arrived at Key West. The little town, with its gardens of cocoa-nut, palms, and oleander trees in full bloom, looked very peaceful and quiet after our late experiences at sea. Our shipwrecked mariners were fortunate in finding opportunities for an immediate return to New York, a passage being offered to the captain and mate on board a steamer leaving that very afternoon, while the crew took service on board other vessels. No sooner had

the news spread, of the loss of the *Americus*, than four or five wreckers started like so many vultures to prey upon the corpse. They returned, after about a week's absence, having actually collected something over a thousand dollars' worth of rigging, sails, etc., which were sold in Key West. This pursuit bears an ill name from old association, but it is now a perfectly legal and systematized business, though a much less profitable one than it used to be in old times, when the absence of lighthouses along the reef made accidents far more frequent. The captain's only hope of saving any part of his vessel and cargo in those days was in allowing himself to be fleeced by the wreckers, who charged an enormous price for their services. Now a court of adjudication settles all disputes, and the wreckers assert that their occupation is one which protects rather than endangers the interests of commerce and navigation. Yet it may be doubted whether a business which is exclusively based upon other men's misfortunes can ever have a very benevolent character.

So ended our rather stormy and not uneventful cruise; full of interest for the naturalist, who rarely has an opportunity to study in their living attitudes and natural colors the animals which inhabit the deep sea. After a few days spent at Key West, while our coal and supplies were renewed and certain slight repairs made on the *Bibb*, we started upon another excursion of the same kind, an account of which will be found in a subsequent number.

